

EAST Search History

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|------|---|---|------------------|---------|---------------------|
| L1 | 738 | (257/107,148,156).CCLS. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2009/06/19 20:03 |
| L2 | 632 | (257/107,148,156).CCLS. | USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2009/06/19 20:03 |
| L3 | 0 | power adj semiconductor adj (device element apparatus).clm. and emitter.clm. and (blocking stop) adj zone.clm. and (sulfur selenium).clm. and (doping dopant impurity concentration) near4 profile.clm. and ("200" adj meV "0.2 eV") near10 conduction near10 valence.clm. and "on" adj state.clm. and "off" adj state.clm. and (semiconductor silicon gallium adj arsenide gallium adj nitride).clm. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/19 20:13 |
| S1 | 174 | (US-5291040-\$ or US-5293054-\$ or US-5304821-\$ or US-5306930-\$ or US-5311042-\$ or US-5336907-\$ or US-5365477-\$ or US-5371385-\$ or US-5378903-\$ or US-5429953-\$ or US-5401985-\$ or US-5444272-\$ or US-5477064-\$ or US-5486709-\$ or US-5491351-\$ or US-5710445-\$ or US-5719413-\$ or US-6111278-\$ or US-6107649-\$ or US-RE36818-\$ or US-6104043-\$ or US-6049108-\$ or US-6020623-\$ or US-5796124-\$ or US-6242766-\$ or US-6268639-\$).did. or (US-6271545-\$ or US-6274892-\$ or US-6313485-\$ or US-6380569-\$ or US-6407412-\$ or US-6420774-\$ or US-6437383-\$ or US-6501099-\$ or US-6555848-\$ or US-6734462-\$ or US-6703647-\$ or US-6756612-\$ or US-5065211-\$ or US-4963972-\$ or US-4969028-\$ or US-4851889-\$ or US-4910573-\$ or US-4825266-\$ or US-4559551-\$ or US-4520552-\$ or US-4107731-\$ or US-4089024-\$ or US-4081818-\$ or US-4053921-\$ or US-4040170-\$ or US-3988771-\$ or US-3739236-\$).did. or (US-3697827-\$ or US-3577046-\$ or US-3470036-\$ or US-3337782-\$ or US-5629535-\$ or US-5757033-\$ or US-5144401-\$ or US-5204541-\$ or US-5457329-\$ or US-5483087-\$ or US-5550392-\$ or US-5591991-\$ or US-6441408-\$ or US-6703294-\$ or US-6696705-\$ or US-6218217-\$ or US-5498884-\$ or US-5504351-\$ or US-5525816-\$ or US-5543639-\$ or US-5528058-\$ or US-5569941-\$ or US-5684306-\$ or US-5659185-\$ or US-5705835-\$ or US-5262336-\$ or US-5245202-\$).did. or (US-5202750-\$ or US-5151766-\$ or US-5124772-\$ or US-5083185-\$ or US-5068704-\$ or US-5464994-\$ or US-5461242-\$ or US-5444271-\$ or US-5539217-\$ or US-5471075-\$ or US-5610415-\$ or US-5587594-\$ or US-5574297-\$ or US-5644150-\$ or US-5637888-\$ or US-5668385-\$ or US-5661314-\$ or US-5793066-\$ or US-5684323-\$ or US-5682044-\$ or US-5679966-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-6043112-\$ or US-5936267-\$ or US-5981981-\$).did. or (US-6111290-\$ or US-6054728-\$ or US-6198115-\$ or US-6169299-\$ or US-6660569-\$ or US-6278140-\$ or US-4219829-\$ or US-4062032-\$ or US-4032958-\$ or US-4760431-\$ or US-4717940-\$ or US-4914496-\$ or US-RE32784-\$ or US-RE34158-\$ or US-5091766-\$ or US-5306929-\$ or US-5210432-\$ or US-5359220-\$ or US-5319222-\$ or US-5319221-\$ or US-5381026-\$ or US-5381025-\$ or US-5412228-\$ or US-5407491-\$).did. or (US-20010005024-\$ or US-20030122151-\$ or US-20030094857-\$ or US-20030006497-\$ or US-20020024056-\$ or US-20040137665-\$ or US-20040084724-\$ or US- | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2004/08/11 11:13 |

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|----|-----|---|---|----|-----|---------------------|
| | | 20040080015-\$ or US-20030197247-\$ or US-20010005036-\$).did. or (US-5528058-\$ or US-3953243-\$ or DE-3917769-\$ or DE-3837747-\$ or DE-3837748-\$ or DE-10214176-\$ or EP-760528-\$ or EP-621640-\$ or DE-3932490-\$).did. or (JP-01270352-\$ or JP-03070176-\$ or JP-02296370-\$ or JP-04317375-\$ or JP-04240775-\$ or JP-03116874-\$ or JP-06151825-\$ or JP-06061479-\$ or JP-04357875-\$).did. or (US-5079175-\$ or DE-19909105-\$ or US-5710445-\$ or US-4642669-\$ or EP-1017093-\$ or DE-2734726-\$ or EP-144876-\$ or EP-347778-\$ or DE-3917769-\$ or EP-621640-\$ or DE-3932490-\$ or DE-19731495-\$ or DE-19531369-\$ or WO-200203469-\$ or EP-1097480-\$ or EP-1017093-\$ or DE-10243758-\$ or DE-10048165-\$ or DE-10214176-\$).did. | | | | |
| S2 | 1 | S1 and gerstenmaier.in. | EPO; DERWENT | OR | OFF | 2004/08/11 11:13 |
| S3 | 157 | 257/144 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/11/11 10:06 |
| S4 | 247 | 257/152 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/08 10:54 |
| S5 | 172 | 257/163 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/08 10:54 |
| S6 | 117 | 257/164 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/08 10:56 |
| S7 | 76 | 257/165 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/08 10:54 |
| S8 | 616 | ((257/110 or 257/144 or 257/152 or 257/163 or 257/164 or 257/165) and @pd<"19980717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/10 12:46 |
| S9 | 4 | ((257/110 or 257/144 or 257/152 or 257/163 or 257/164 or 257/165) and @pd<"19980717") and (selenium or sulfur) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/08 12:10 |

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| S10 | 616 | (257/110 or 257/144 or 257/152 or 257/163 or 257/164 or 257/165) and @pd<"19980717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/08 13:49 |
| S11 | 576 | (257/110 or 257/144 or 257/152 or 257/163 or 257/164 or 257/165) and @pd<"19970717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/10 13:54 |
| S12 | 169 | ((257/110 or 257/144 or 257/152 or 257/163 or 257/164 or 257/165) and @pd<"19970717") and (stop\$5 or buffer\$3 or phosphor\$2 or arsenic) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/10 14:38 |
| S13 | 5 | stop\$4 adj2 buffer and thyristor\$1 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/10 14:38 |
| S14 | 25 | ((257/110 or 257/144 or 257/152 or 257/163 or 257/164 or 257/165) and @pd<"19970717") and (stop\$5 or buffer\$3) and (phosphor\$2 or arsenic) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/10 15:00 |
| S15 | 5 | energy adj level\$1 near (phosphorus or arsenic or selenium or sulfur) near dop\$4 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/10 15:47 |
| S16 | 1 | ionization adj energy near (phosphorus or arsenic or selenium or sulfur) near dop\$4 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/10 16:42 |
| S17 | 292 | (sulfur with selenium) and "257"/\$3.cds. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/11 07:40 |
| S18 | 57 | (sulfur with selenium) and "257"/\$3.cds. and emitter\$1 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/10 16:49 |

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| S19 | 89 | (sulfur with selenium) and "257"/\$3.ccls. and band adj gap | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/10 16:52 |
| S20 | 14 | ((sulfur with selenium) and "257"/\$3.ccls. and emitter\$1) and ((sulfur with selenium) and "257"/\$3.ccls. and band adj gap) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/10 18:56 |
| S21 | 4 | ((((sulfur with selenium) and "257"/\$3.ccls. and emitter\$1) and ((sulfur with selenium) and "257"/\$3.ccls. and band adj gap)) and dopant and (buffer or stop\$4) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/11 07:34 |
| S22 | 2 | ionization adj energ\$3 with sulfur with (dopant or impurit\$3 or foreign) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/10 17:07 |
| S23 | 37 | dopant and (selenium or sulfur) and emitter and (buffer adj layer or stop\$4 adj zone) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/10 17:59 |
| S24 | 0 | (buffer adj layer or stop\$4 adj zone) same dopant same (selenium or sulfur) same ionization adj energ\$3 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/10 18:01 |
| S25 | 0 | (buffer adj layer or stop\$4 adj zone) same (selenium or sulfur) same ionization adj energ\$3 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/10 18:01 |
| S26 | 3 | (dopant or impurit\$3) same (selenium or sulfur) same ionization adj energ\$3 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/10 18:02 |
| S27 | 7 | buffer adj layer with dopant with (sulfur or selenium) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/10 18:26 |

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| S28 | 0 | stop adj zone with dopant with (sulfur or selenium) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/10 18:26 |
| S29 | 7 | ((sulfur with selenium with dopant) and "257"/\$3.ccls. and emitter\$1) and ("257"/\$3.ccls. and band adj gap) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/10 18:56 |
| S30 | 44720 | ionization energ\$3 with sulfur with selenium | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/11 07:42 |
| S31 | 44672 | ionization energ\$3 with sulfur with selenium with dopant\$1 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/11 07:42 |
| S32 | 1 | ionization adj energ\$3 with sulfur with selenium with dopant\$1 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/11 07:43 |
| S33 | 2 | "5574297".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/11 07:55 |
| S34 | 2 | "5359220".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/11 08:02 |
| S35 | 3 | "5528058".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/11 08:03 |
| S36 | 1686 | dopant with phosphorus with type | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/11 08:04 |

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| S37 | 1454 | dopant with phosphorus with n adj2 type | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/11 08:07 |
| S38 | 205 | dopant with phosphorus with n+ | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/11 08:10 |
| S39 | 131 | (dopant with phosphorus with n+) and @pd<"19970717" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2001/06/11 08:11 |
| S40 | 738 | 257/110 or 257/144 or 257/152 or 257/163 or 257/164 or 257/165 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/26 18:35 |
| S41 | 1 | (257/110 or 257/144 or 257/152 or 257/163 or 257/164 or 257/165) and ((stop adj zone near15 active) near15 (off-state or off adj state)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/26 18:39 |
| S42 | 1 | (257/110 or 257/144 or 257/152 or 257/163 or 257/164 or 257/165) and ((stop\$4 adj zone near15 active) near15 (off-state or off adj state)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/26 18:41 |
| S43 | 1 | (257/110 or 257/144 or 257/152 or 257/163 or 257/164 or 257/165) and ((zone near15 active) near15 (off-state or off adj state)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/26 19:11 |
| S44 | 3 | "5528058".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 15:26 |
| S45 | 3 | "5357130".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 12:44 |

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| S46 | 0 | stop\$4 adj zone same dopant same (ON-state or OFF-state or "on state" or "off state") | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 12:48 |
| S47 | 31 | dopant near12 ionization adj energy | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 12:58 |
| S48 | 5 | (igbt or mct).ti,ab. and ((dopant or impurity or impurities) near12 (indium or tellurium)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 13:11 |
| S49 | 9 | semiconductor.ti,ab. and ((dopant or impurity or impurities) same (indium or tellurium) same ionization) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 14:21 |
| S50 | 0 | ((((sulfur or selenium) near12 "on-state voltage") same (dopant or impurit\$3)) and semiconductor.ti,ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 14:23 |
| S51 | 5 | ((sulfur or selenium) near12 ("on-state" or voltage) same (dopant or impurit\$3)) and semiconductor.ti,ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 14:27 |
| S52 | 0 | ((((sulfur or selenium) near12 (ionization adj (energy or potential))) near12 (impurit\$3 or dop\$3)) same ((on-state or on adj state) adj2 voltage) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 14:31 |
| S53 | 2 | ((sulfur or selenium) near12 (ionization adj (energy or potential))) near12 (impurit\$3 or dop\$3) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 14:46 |
| S54 | 0 | ((selenium or sulfur) near12 on-state adj voltage) and (thyristor or mct or igbt).ti,ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 14:48 |

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| S55 | 35 | (selenium or sulfur) and (thyristor or mct or igbt).ti,ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 14:48 |
| S56 | 2 | ((selenium or sulfur) same (dopant or impurit\$3)) and (thyristor or mct or igbt).ti,ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 14:49 |
| S57 | 40 | ((blocking or stop\$4) adj2 (zone or layer) same emitter) and thyristor.ti,ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 15:28 |
| S58 | 13 | ((blocking or stop\$4) adj2 (zone or layer) same emitter) same voltage and thyristor.ti,ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 15:29 |
| S59 | 0 | ((((blocking or stop\$4) adj2 (zone or layer) same emitter) same voltage same on-state) and thyristor.ti,ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 15:30 |
| S60 | 0 | ((((blocking or stop\$4) adj2 (zone or layer) same emitter) same voltage same "on") and thyristor.ti,ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 15:30 |
| S61 | 5 | ((((blocking or stop\$4) adj2 (zone or layer) same emitter) same voltage) and thyristor.ti,ab. and power | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 15:32 |
| S62 | 1 | ((((blocking or stop\$4) adj2 (zone or layer) same emitter) same voltage) and thyristor.ti,ab. and power and (dopant or impurit\$3) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 15:49 |
| S63 | 3 | "5710445".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 15:54 |

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| S64 | 1 | ((selenium or sulfur) near12 (dopant or impurity)) and thyristor.ti,ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 15:56 |
| S65 | 0 | ((selenium or sulfur) near12 ionization adj (potential or energy)) and thyristor | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 15:57 |
| S66 | 0 | ((selenium or sulfur) near12 ionization adj (potential or energy)) and barrier adj layer | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 15:58 |
| S67 | 20 | (selenium or sulfur) near12 ionization adj (potential or energy) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 15:58 |
| S68 | 2 | (selenium or sulfur) near12 ionization adj (potential or energy) and semiconductor.ti,ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 16:02 |
| S69 | 1 | (selenium or sulfur) near12 ionization adj (potential or energy) and (igbt or thyristor or mosfet) and semiconductor.ti,ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 16:04 |
| S70 | 2 | (selenium or sulfur) near12 ionization adj (potential or energy) and (igbt or thyristor or mosfet or semiconductor).ti,ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 16:05 |
| S71 | 27 | ((selenium or sulfur) near12 (barrier adj layer)) and (igbt or thyristor or mosfet or semiconductor).ti,ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 16:06 |
| S72 | 9 | ((selenium or sulfur) near5 (barrier adj layer)) and (igbt or thyristor or mosfet or semiconductor).ti,ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 16:11 |

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| S73 | 0 | ((selenium or sulfur) near5 (barrier adj layer)) and (igbt or mosfet or semiconductor).ti,ab. and thyristor.ti. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 16:08 |
| S74 | 0 | ((selenium or sulfur) near5 (barrier adj layer)) and thyristor.ti. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 16:08 |
| S75 | 0 | ((selenium or sulfur) near5 (barrier adj layer)) and thyristor.ti,ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 16:09 |
| S76 | 0 | ((selenium or sulfur) near5 (barrier adj layer)) and (mct or thyristor or igbt).ti,ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 16:09 |
| S77 | 1 | ((selenium or sulfur) near5 (dopant or impurity) near5 (barrier adj layer)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 16:12 |
| S78 | 0 | ((selenium or sulfur) near5 (dopant or impurity) near5 (barrier adj layer)) and silicon adj substrate | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 16:13 |
| S79 | 71 | ((selenium or sulfur) near5 (dopant or impurity)) and silicon adj substrate | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 16:14 |
| S80 | 3 | ((selenium or sulfur) near5 (dopant or impurity)) and ionization adj (energy or potential) and silicon adj substrate | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 16:24 |
| S81 | 15 | (low-noise or low adj noise) adj2 semiconductor and power adj2 semiconductor | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 16:26 |

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| S82 | 33 | ((low-noise or low adj noise) near5 power) near5 semiconductor).ti,ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 16:28 |
| S83 | 0 | ((low-noise or low adj noise) near5 power) near5 semiconductor).ti,ab. and thyristor | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 16:28 |
| S84 | 3 | ((low-noise or low adj noise) near5 power) near5 semiconductor adj device).ti,ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 16:30 |
| S85 | 25 | ((low-noise or low adj noise) near5 power).ti,ab. and "257"/\$6.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 17:05 |
| S86 | 2 | ((low-noise or low adj noise) near5 power).ti,ab. and "257"/\$6.ccls. and (thyristor or igbt or insulated gate adj bipolar adj transistor or mct) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/02 15:26 |
| S87 | 2 | jp-02105578\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/01/27 17:06 |
| S88 | 458 | stop adj zone | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/01 16:36 |
| S89 | 2 | (stop adj zone) and (((257/110) or (257/144) or (257/152) or (257/163) or (257/164) or (257/165)).CCLS.) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/01 16:36 |
| S90 | 586 | ((257/110) or (257/144) or (257/152) or (257/163) or (257/164) or (257/165)).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2002/05/01 20:30 |

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|-----|----|--|---|----|----|---------------------|
| S91 | 60 | buffer adj (layer or film) and (((257/110) or (257/144) or (257/152) or (257/163) or (257/164) or (257/165)).CCLS.) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/01 17:19 |
| S92 | 29 | ((buffer adj (layer or film) and (((257/110) or (257/144) or (257/152) or (257/163) or (257/164) or (257/165)).CCLS.)) and (sulfur or s or selenium or se) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/01 17:20 |
| S93 | 0 | ((buffer adj (layer or film) and (((257/110) or (257/144) or (257/152) or (257/163) or (257/164) or (257/165)).CCLS.)) and (sulfur or s or selenium or se)) and (buffer near12 (selenium or se or s or sulfur)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/01 17:21 |
| S94 | 3 | ((buffer adj (layer or film) and (((257/110) or (257/144) or (257/152) or (257/163) or (257/164) or (257/165)).CCLS.)) and (sulfur or s or selenium or se)) and (buffer same (selenium or se or s or sulfur)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/01 17:25 |
| S95 | 0 | ((buffer adj (layer or film) and (((257/110) or (257/144) or (257/152) or (257/163) or (257/164) or (257/165)).CCLS.)) and (sulfur or s or selenium or se)) and (buffer same (selenium or se or sulfur)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/01 17:23 |
| S96 | 0 | ((buffer adj (layer or film) and (((257/110) or (257/144) or (257/152) or (257/163) or (257/164) or (257/165)).CCLS.)) and (sulfur or s or selenium or se)) and ((buffer near15 (dop\$3 or impurit\$3)) same ioniz\$5) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/01 17:27 |
| S97 | 0 | ((buffer adj (layer or film) and (((257/110) or (257/144) or (257/152) or (257/163) or (257/164) or (257/165)).CCLS.)) and (sulfur or s or selenium or se)) and ((buffer near15 (selenium or sulfur))) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/01 17:28 |

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|------|----|---|---|----|-----|---------------------|
| S98 | 77 | (US-4717940-\$ or US-4760431-\$ or US-RE32784-\$ or US-4851889-\$ or US-4914496-\$ or US-4963972-\$ or US-5065211-\$ or US-5068704-\$ or US-5381025-\$ or US-5401985-\$ or US-5429953-\$ or US-5444271-\$ or US-5444272-\$ or US-5461242-\$ or US-5477064-\$ or US-5486709-\$ or US-5498884-\$ or US-5525816-\$ or US-5528058-\$ or US-5543639-\$ or US-5569941-\$ or US-5610415-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5091766-\$).did. or (US-5124772-\$ or US-5202750-\$ or US-5210432-\$ or US-5245202-\$ or US-5293054-\$ or US-5304821-\$ or US-5306930-\$ or US-5336907-\$ or US-5365477-\$ or US-5371385-\$ or US-5378903-\$ or US-5661314-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5710445-\$ or US-5719413-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$).did. or (US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-4032958-\$ or US-4053921-\$ or US-4062032-\$ or US-3337782-\$ or US-3470036-\$).did. or (US-20010005024-\$ or US-20020024056-\$).did. or (JP-06061479-\$ or JP-06151825-\$ or JP-01270352-\$ or JP-02296370-\$ or JP-03070176-\$ or JP-03116874-\$ or JP-04240775-\$ or JP-04317375-\$ or JP-04357875-\$).did. | US-PGPUB; USPAT; JPO | OR | OFF | 2002/05/02 11:40 |
| S99 | 2 | ((US-4717940-\$ or US-4760431-\$ or US-RE32784-\$ or US-4851889-\$ or US-4914496-\$ or US-4963972-\$ or US-5065211-\$ or US-5068704-\$ or US-5381025-\$ or US-5401985-\$ or US-5429953-\$ or US-5444271-\$ or US-5444272-\$ or US-5461242-\$ or US-5477064-\$ or US-5486709-\$ or US-5498884-\$ or US-5525816-\$ or US-5528058-\$ or US-5543639-\$ or US-5569941-\$ or US-5610415-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5091766-\$).did. or (US-5124772-\$ or US-5202750-\$ or US-5210432-\$ or US-5245202-\$ or US-5293054-\$ or US-5304821-\$ or US-5306930-\$ or US-5336907-\$ or US-5365477-\$ or US-5371385-\$ or US-5378903-\$ or US-5661314-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5710445-\$ or US-5719413-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$).did. or (US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-4032958-\$ or US-4053921-\$ or US-4062032-\$ or US-3337782-\$ or US-3470036-\$).did. or (US-20010005024-\$ or US-20020024056-\$).did. or (JP-06061479-\$ or JP-06151825-\$ or JP-01270352-\$ or JP-02296370-\$ or JP-03070176-\$ or JP-03116874-\$ or JP-04240775-\$ or JP-04317375-\$ or JP-04357875-\$).did.) and (block\$3 or buffer or stop\$4) adj (region or film or layer) and ionization | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/01 20:34 |
| S100 | 1 | ((US-4717940-\$ or US-4760431-\$ or US-RE32784-\$ or US-4851889-\$ or US-4914496-\$ or US-4963972-\$ or US-5065211-\$ or US-5068704-\$ or US-5381025-\$ or US-5401985-\$ or US-5429953-\$ or US-5444271-\$ or US-5444272-\$ or US-5461242-\$ or US-5477064-\$ or US-5486709-\$ or US-5498884-\$ or US-5525816-\$ or US-5528058-\$ or US-5543639-\$ or US-5569941-\$ or US-5610415-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5091766-\$).did. or (US-5124772-\$ or US-5202750-\$ or US-5210432-\$ or US-5245202-\$ or US-5293054-\$ or US-5304821-\$ or US-5306930-\$ or US-5336907-\$ or US-5365477-\$ or US-5371385-\$ or US-5378903-\$ or US-5661314-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5710445-\$ or US-5719413-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$).did. or (US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-4032958-\$ or US-4053921-\$ or US-4062032-\$ or US-3337782-\$ or US-3470036-\$).did. or (US-20010005024-\$ or US-20020024056-\$).did. or (JP-06061479-\$ or JP-06151825-\$ or JP-01270352-\$ or JP-02296370-\$ or JP-03070176-\$ or JP-03116874-\$ or JP-04240775-\$ or JP-04317375-\$ or JP-04357875-\$).did.) and (block\$3 or buffer or stop\$4) adj (region or film or layer) and (energy adj level or band adj2 gap) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/01 20:43 |

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|------|---|---|---|----|----|---------------------|
| S101 | 0 | ((US-4717940-\$ or US-4760431-\$ or US-RE32784-\$ or US-4851889-\$ or US-4914496-\$ or US-4963972-\$ or US-5065211-\$ or US-5068704-\$ or US-5381025-\$ or US-5401985-\$ or US-5429953-\$ or US-5444271-\$ or US-5444272-\$ or US-5461242-\$ or US-5477064-\$ or US-5486709-\$ or US-5498884-\$ or US-5525816-\$ or US-5528058-\$ or US-5543639-\$ or US-5569941-\$ or US-5610415-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5091766-\$).did. or (US-5124772-\$ or US-5202750-\$ or US-5210432-\$ or US-5245202-\$ or US-5293054-\$ or US-5304821-\$ or US-5306930-\$ or US-5336907-\$ or US-5365477-\$ or US-5371385-\$ or US-5378903-\$ or US-5661314-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5710445-\$ or US-5719413-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$).did. or (US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-4032958-\$ or US-4053921-\$ or US-4062032-\$ or US-3337782-\$ or US-3470036-\$).did. or (US-20010005024-\$ or US-20020024056-\$).did. or (JP-06061479-\$ or JP-06151825-\$ or JP-01270352-\$ or JP-02296370-\$ or JP-03070176-\$ or JP-03116874-\$ or JP-04240775-\$ or JP-04317375-\$ or JP-04357875-\$).did.) and (block\$3 or buffer or stop\$4) adj (region or film or layer) near20 (indium or tellurium or selenium of sulfur or in or se) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/01 20:45 |
| S102 | 2 | ((US-4717940-\$ or US-4760431-\$ or US-RE32784-\$ or US-4851889-\$ or US-4914496-\$ or US-4963972-\$ or US-5065211-\$ or US-5068704-\$ or US-5381025-\$ or US-5401985-\$ or US-5429953-\$ or US-5444271-\$ or US-5444272-\$ or US-5461242-\$ or US-5477064-\$ or US-5486709-\$ or US-5498884-\$ or US-5525816-\$ or US-5528058-\$ or US-5543639-\$ or US-5569941-\$ or US-5610415-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5091766-\$).did. or (US-5124772-\$ or US-5202750-\$ or US-5210432-\$ or US-5245202-\$ or US-5293054-\$ or US-5304821-\$ or US-5306930-\$ or US-5336907-\$ or US-5365477-\$ or US-5371385-\$ or US-5378903-\$ or US-5661314-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5710445-\$ or US-5719413-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$).did. or (US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-4032958-\$ or US-4053921-\$ or US-4062032-\$ or US-3337782-\$ or US-3470036-\$).did. or (US-20010005024-\$ or US-20020024056-\$).did. or (JP-06061479-\$ or JP-06151825-\$ or JP-01270352-\$ or JP-02296370-\$ or JP-03070176-\$ or JP-03116874-\$ or JP-04240775-\$ or JP-04317375-\$ or JP-04357875-\$).did.) and (block\$3 or buffer or stop\$4) adj (region or film or layer) and (indium or tellurium or selenium of sulfur or in or se) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/01 20:49 |
| S103 | 2 | ((US-4717940-\$ or US-4760431-\$ or US-RE32784-\$ or US-4851889-\$ or US-4914496-\$ or US-4963972-\$ or US-5065211-\$ or US-5068704-\$ or US-5381025-\$ or US-5401985-\$ or US-5429953-\$ or US-5444271-\$ or US-5444272-\$ or US-5461242-\$ or US-5477064-\$ or US-5486709-\$ or US-5498884-\$ or US-5525816-\$ or US-5528058-\$ or US-5543639-\$ or US-5569941-\$ or US-5610415-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5091766-\$).did. or (US-5124772-\$ or US-5202750-\$ or US-5210432-\$ or US-5245202-\$ or US-5293054-\$ or US-5304821-\$ or US-5306930-\$ or US-5336907-\$ or US-5365477-\$ or US-5371385-\$ or US-5378903-\$ or US-5661314-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5710445-\$ or US-5719413-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$).did. or (US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-4032958-\$ or US-4053921-\$ or US-4062032-\$ or US-3337782-\$ or US-3470036-\$).did. or (US-20010005024-\$ or US-20020024056-\$).did. or (JP-06061479-\$ or JP-06151825-\$ or JP-01270352-\$ or JP-02296370-\$ or JP-03070176-\$ or JP-03116874-\$ or JP-04240775-\$ or JP-04317375-\$ or JP-04357875-\$).did.) and (block\$3 or buffer or stop\$4) adj (region or film or layer) and (indium or tellurium or selenium of sulfur or in or se or te) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/01 20:50 |

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|------|------|--|---|----|----|---------------------|
| S104 | 0 | ((US-4717940-\$ or US-4760431-\$ or US-RE32784-\$ or US-4851889-\$ or US-4914496-\$ or US-4963972-\$ or US-5065211-\$ or US-5068704-\$ or US-5381025-\$ or US-5401985-\$ or US-5429953-\$ or US-5444271-\$ or US-5444272-\$ or US-5461242-\$ or US-5477064-\$ or US-5486709-\$ or US-5498884-\$ or US-5525816-\$ or US-5528058-\$ or US-5543639-\$ or US-5569941-\$ or US-5610415-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5091766-\$).did. or (US-5124772-\$ or US-5202750-\$ or US-5210432-\$ or US-5245202-\$ or US-5293054-\$ or US-5304821-\$ or US-5306930-\$ or US-5336907-\$ or US-5365477-\$ or US-5371385-\$ or US-5378903-\$ or US-5661314-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5710445-\$ or US-5719413-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$).did. or (US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-4032958-\$ or US-4053921-\$ or US-4062032-\$ or US-3337782-\$ or US-3470036-\$).did. or (US-20010005024-\$ or US-20020024056-\$).did. or (JP-06061479-\$ or JP-06151825-\$ or JP-01270352-\$ or JP-02296370-\$ or JP-03070176-\$ or JP-03116874-\$ or JP-04240775-\$ or JP-04317375-\$ or JP-04357875-\$).did.) and (block\$3 or buffer or stop\$4) adj (region or film or layer) and (band near2 gap) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/01 20:50 |
| S105 | 1 | ((US-4717940-\$ or US-4760431-\$ or US-RE32784-\$ or US-4851889-\$ or US-4914496-\$ or US-4963972-\$ or US-5065211-\$ or US-5068704-\$ or US-5381025-\$ or US-5401985-\$ or US-5429953-\$ or US-5444271-\$ or US-5444272-\$ or US-5461242-\$ or US-5477064-\$ or US-5486709-\$ or US-5498884-\$ or US-5525816-\$ or US-5528058-\$ or US-5543639-\$ or US-5569941-\$ or US-5610415-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5091766-\$).did. or (US-5124772-\$ or US-5202750-\$ or US-5210432-\$ or US-5245202-\$ or US-5293054-\$ or US-5304821-\$ or US-5306930-\$ or US-5336907-\$ or US-5365477-\$ or US-5371385-\$ or US-5378903-\$ or US-5661314-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5710445-\$ or US-5719413-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$).did. or (US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-4032958-\$ or US-4053921-\$ or US-4062032-\$ or US-3337782-\$ or US-3470036-\$).did. or (US-20010005024-\$ or US-20020024056-\$).did. or (JP-06061479-\$ or JP-06151825-\$ or JP-01270352-\$ or JP-02296370-\$ or JP-03070176-\$ or JP-03116874-\$ or JP-04240775-\$ or JP-04317375-\$ or JP-04357875-\$).did.) and (block\$3 or buffer or stop\$4) adj (region or film or layer) and energy adj level | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/01 20:51 |
| S106 | 457 | foreign adj atom | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/02 09:36 |
| S107 | 58 | foreign adj atom and "257"/\$6.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/02 09:37 |
| S108 | 3447 | stop\$4 adj (zone or region or layer or film) and "257"/\$6.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/02 09:40 |

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|------|------|---|---|----|-----|---------------------|
| S109 | 2240 | (stop or stopping) adj (zone or region or layer or film) and "257"/\$6.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/02 09:41 |
| S110 | 30 | (stop or stopping) adj zone and "257"/\$6.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/02 11:37 |
| S111 | 8 | (stop or stopping) adj zone and "257"/\$6.ccls. and thyristor | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/02 09:44 |
| S112 | 77 | (US-5661314-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5710445-\$ or US-5719413-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$ or US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-5444271-\$ or US-5444272-\$).did. or (US-5543639-\$ or US-5569941-\$ or US-5610415-\$ or US-5461242-\$ or US-5477064-\$ or US-5486709-\$ or US-5498884-\$ or US-5525816-\$ or US-5528058-\$ or US-5378903-\$ or US-5371385-\$ or US-5365477-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5401985-\$ or US-5336907-\$ or US-5381025-\$ or US-5429953-\$ or US-5304821-\$ or US-5293054-\$ or US-5245202-\$ or US-5210432-\$ or US-5202750-\$ or US-5124772-\$ or US-5091766-\$ or US-5068704-\$).did. or (US-5065211-\$ or US-4963972-\$ or US-4914496-\$ or US-4851889-\$ or US-RE32784-\$ or US-4760431-\$ or US-4717940-\$ or US-4062032-\$ or US-4053921-\$ or US-4032958-\$ or US-3470036-\$ or US-3337782-\$ or US-5306930-\$).did. or (US-20010005024-\$ or US-20020024056-\$).did. or (JP-06151825-\$ or JP-06061479-\$ or JP-04357875-\$ or JP-04317375-\$ or JP-04240775-\$ or JP-03116874-\$ or JP-03070176-\$ or JP-02296370-\$ or JP-01270352-\$).did. | US-PGPUB; USPAT; JPO | OR | OFF | 2002/05/02 11:39 |
| S113 | 77 | (US-5661314-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5710445-\$ or US-5719413-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$ or US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-5444271-\$ or US-5444272-\$).did. or (US-5543639-\$ or US-5569941-\$ or US-5610415-\$ or US-5461242-\$ or US-5477064-\$ or US-5486709-\$ or US-5498884-\$ or US-5525816-\$ or US-5528058-\$ or US-5378903-\$ or US-5371385-\$ or US-5365477-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5401985-\$ or US-5336907-\$ or US-5381025-\$ or US-5429953-\$ or US-5304821-\$ or US-5293054-\$ or US-5245202-\$ or US-5210432-\$ or US-5202750-\$ or US-5124772-\$ or US-5091766-\$ or US-5068704-\$).did. or (US-5065211-\$ or US-4963972-\$ or US-4914496-\$ or US-4851889-\$ or US-RE32784-\$ or US-4760431-\$ or US-4717940-\$ or US-4062032-\$ or US-4053921-\$ or US-4032958-\$ or US-3470036-\$ or US-3337782-\$ or US-5306930-\$).did. or (US-20010005024-\$ or US-20020024056-\$).did. or (JP-06151825-\$ or JP-06061479-\$ or JP-04357875-\$ or JP-04317375-\$ or JP-04240775-\$ or JP-03116874-\$ or JP-03070176-\$ or JP-02296370-\$ or JP-01270352-\$).did. | US-PGPUB; USPAT; JPO | OR | OFF | 2002/05/02 11:39 |

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|------|----|--|---|----|-----|---------------------|
| S114 | 18 | ((US-5661314-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5710445-\$ or US-5719413-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$ or US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-5444271-\$ or US-5444272-\$).did. or (US-5543639-\$ or US-5569941-\$ or US-5610415-\$ or US-5461242-\$ or US-5477064-\$ or US-5486709-\$ or US-5498884-\$ or US-5525816-\$ or US-5528058-\$ or US-5378903-\$ or US-5371385-\$ or US-5365477-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5401985-\$ or US-5336907-\$ or US-5381025-\$ or US-5429953-\$ or US-5304821-\$ or US-5293054-\$ or US-5245202-\$ or US-5210432-\$ or US-5202750-\$ or US-5124772-\$ or US-5091766-\$ or US-5068704-\$).did. or (US-5065211-\$ or US-4963972-\$ or US-4914496-\$ or US-4851889-\$ or US-RE32784-\$ or US-4760431-\$ or US-4717940-\$ or US-4062032-\$ or US-4053921-\$ or US-4032958-\$ or US-3470036-\$ or US-3337782-\$ or US-5306930-\$).did. or (US-20010005024-\$ or US-20020024056-\$).did. or (JP-06151825-\$ or JP-06061479-\$ or JP-04357875-\$ or JP-04317375-\$ or JP-04240775-\$ or JP-03116874-\$ or JP-03070176-\$ or JP-02296370-\$ or JP-01270352-\$).did.) and ((dop\$3 or impurit\$3 or donor or acceptor) near12 (carbon or c or titanium or ti or se or selenium or cr or chromium or ta or tantalum or cs or cesium or ba or barium or sulfur or s or manganese or mn or pt or platinum or au or gold or silver or ag)) | US-PGPUB; USPAT; JPO | OR | OFF | 2002/05/02 13:24 |
| S115 | 3 | ("3953243").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2002/05/02 13:05 |
| S116 | 0 | ((US-5661314-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5710445-\$ or US-5719413-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$ or US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-5444271-\$ or US-5444272-\$).did. or (US-5543639-\$ or US-5569941-\$ or US-5610415-\$ or US-5461242-\$ or US-5477064-\$ or US-5486709-\$ or US-5498884-\$ or US-5525816-\$ or US-5528058-\$ or US-5378903-\$ or US-5371385-\$ or US-5365477-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5401985-\$ or US-5336907-\$ or US-5381025-\$ or US-5429953-\$ or US-5304821-\$ or US-5293054-\$ or US-5245202-\$ or US-5210432-\$ or US-5202750-\$ or US-5124772-\$ or US-5091766-\$ or US-5068704-\$).did. or (US-5065211-\$ or US-4963972-\$ or US-4914496-\$ or US-4851889-\$ or US-RE32784-\$ or US-4760431-\$ or US-4717940-\$ or US-4062032-\$ or US-4053921-\$ or US-4032958-\$ or US-3470036-\$ or US-3337782-\$ or US-5306930-\$).did. or (US-20010005024-\$ or US-20020024056-\$).did. or (JP-06151825-\$ or JP-06061479-\$ or JP-04357875-\$ or JP-04317375-\$ or JP-04240775-\$ or JP-03116874-\$ or JP-03070176-\$ or JP-02296370-\$ or JP-01270352-\$).did.) and (((barium or cesium) near12 (dop\$3 or impurit\$3)) near12 thyristor) | US-PGPUB; USPAT; JPO | OR | OFF | 2002/05/02 13:26 |

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|------|------|--|---|----|-----|---------------------|
| S117 | 3 | ((US-5661314-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5710445-\$ or US-5719413-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$ or US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-5444271-\$ or US-5444272-\$).did. or (US-5543639-\$ or US-5569941-\$ or US-5610415-\$ or US-5461242-\$ or US-5477064-\$ or US-5486709-\$ or US-5498884-\$ or US-5525816-\$ or US-5528058-\$ or US-5378903-\$ or US-5371385-\$ or US-5365477-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5401985-\$ or US-5336907-\$ or US-5381025-\$ or US-5429953-\$ or US-5304821-\$ or US-5293054-\$ or US-5245202-\$ or US-5210432-\$ or US-5202750-\$ or US-5124772-\$ or US-5091766-\$ or US-5068704-\$).did. or (US-5065211-\$ or US-4963972-\$ or US-4914496-\$ or US-4851889-\$ or US-RE32784-\$ or US-4760431-\$ or US-4717940-\$ or US-4062032-\$ or US-4053921-\$ or US-4032958-\$ or US-3470036-\$ or US-3337782-\$ or US-5306930-\$).did. or (US-20010005024-\$ or US-20020024056-\$).did. or (JP-06151825-\$ or JP-06061479-\$ or JP-04357875-\$ or JP-04317375-\$ or JP-04240775-\$ or JP-03116874-\$ or JP-03070176-\$ or JP-02296370-\$ or JP-01270352-\$).did.) and (silicon adj substrate near12 thyristor) | US-PGPUB; USPAT; JPO | OR | OFF | 2002/05/02 14:32 |
| S118 | 2 | ("6043112").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2002/05/02 14:33 |
| S119 | 2 | ("6043112").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2002/05/02 15:27 |
| S120 | 1421 | emitter and igbt and power and switching | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/02 15:28 |
| S121 | 40 | emitter adj region and igbt.ti.ab. and power adj2 device and switching | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/02 15:29 |

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|------|-----|---|---|----|-----|---------------------|
| S122 | 105 | (US-5936267-\$ or US-5923055-\$ or US-5894149-\$ or US-5844258-\$ or US-5796124-\$ or US-5793066-\$ or US-6043112-\$ or US-5682044-\$ or US-5569941-\$ or US-5539217-\$ or US-5543639-\$ or US-5528058-\$ or US-5679966-\$ or US-5684306-\$ or US-5637888-\$ or US-5587594-\$ or US-5610415-\$ or US-5336907-\$ or US-5719413-\$ or US-5981981-\$ or US-RE34158-\$ or US-4219829-\$ or US-5407491-\$ or US-5574297-\$ or US-5659185-\$ or US-5661314-\$).did. or (US-5644150-\$ or US-6313485-\$ or US-6278140-\$ or US-6271545-\$ or US-6218217-\$ or US-6198115-\$ or US-6169299-\$ or US-6111290-\$ or US-6111278-\$ or US-6107649-\$ or US-RE36818-\$ or US-6054728-\$ or US-6020623-\$ or US-5710445-\$ or US-5705835-\$ or US-RE32784-\$ or US-4963972-\$ or US-5429953-\$ or US-5457329-\$ or US-5401985-\$ or US-5471075-\$ or US-5464994-\$ or US-5477064-\$ or US-4760431-\$ or US-5486709-\$ or US-5498884-\$ or US-5504351-\$).did. or (US-5525816-\$ or US-5444272-\$ or US-5444271-\$ or US-5461242-\$ or US-5412228-\$ or US-4062032-\$ or US-4717940-\$ or US-5381026-\$ or US-5381025-\$ or US-4053921-\$ or US-5202750-\$ or US-5124772-\$ or US-5091766-\$ or US-5359220-\$ or US-5068704-\$ or US-5378903-\$ or US-5371385-\$ or US-5365477-\$ or US-3470036-\$ or US-4032958-\$ or US-5304821-\$ or US-4851889-\$ or US-5293054-\$ or US-3337782-\$ or US-5245202-\$ or US-5210432-\$ or US-5319222-\$).did. or (US-5065211-\$ or US-5319221-\$ or US-4914496-\$ or US-5306930-\$ or US-5306929-\$).did. or (US-20020024056-\$ or US-20010005024-\$).did. or (DE-3932490-\$ or DE-3837748-\$ or DE-3837747-\$ or US-3953243-\$ or US-5528058-\$).did. or (JP-02296370-\$ or JP-03070176-\$ or JP-03116874-\$ or JP-04240775-\$ or JP-04317375-\$ or JP-04357875-\$ or JP-06151825-\$ or JP-01270352-\$ or JP-06061479-\$).did. or (US-5710445-\$ or EP-1017093-\$ or US-4642669-\$ or US-5079175-\$ or DE-19909105-\$ or DE-3932490-\$).did. | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2002/11/21 16:42 |
| S123 | 617 | ((257/144) or (257/152) or (257/163) or (257/164) or (257/165) or (257/110)).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2002/11/22 09:30 |
| S124 | 4 | ((((257/144) or (257/152) or (257/163) or (257/164) or (257/165) or (257/110)).CCLS.) and (sulfur or selenium or s or se) near15 (doping or dopant or impurities or impurity or implant or implantation or band adj gap or band adj edge or energy adj level or ionization or ionisation)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/08/10 20:45 |
| S125 | 1 | ((((257/144) or (257/152) or (257/163) or (257/164) or (257/165) or (257/110)).CCLS.) and (sulfur or selenium or se) near15 (doping or dopant or impurities or impurity or implant or implantation or band adj gap or band adj edge or energy adj level or ionization or ionisation)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/11/22 15:03 |
| S126 | 3 | ("5602048").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2002/11/22 15:03 |

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|------|----|---|---|----|-----|---------------------|
| S127 | 0 | ("stopadjzonenear12block\$3near2(voltageorpotentialorelectricadjfield)").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2003/04/14 15:49 |
| S128 | 2 | stop adj zone near12 block\$3 near2 (voltage or potential or electric adj field) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2003/04/14 16:16 |
| S129 | 0 | stop adj zone near12 active near12 (on-state or on adj state) near12 (off-state or off adj state) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2003/04/14 16:18 |
| S130 | 0 | stop adj zone near12 active near12 (on-state or on adj state or forward) near12 (off-state or off adj state or reverse) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2003/04/14 16:19 |
| S131 | 0 | stop adj zone near12 (on-state or on adj state or forward) near12 (off-state or off adj state or reverse) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2003/04/14 16:20 |
| S132 | 0 | stop\$4 adj zone near12 (on-state or on adj state or forward) near12 (off-state or off adj state or reverse) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2003/04/14 16:22 |
| S133 | 0 | stop\$4 adj zone near12 (on-state or on adj state or forward or conduction adj band) near12 (off-state or off adj state or reverse or valence adj band) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2003/04/14 16:48 |
| S134 | 2 | stop\$4 adj zone near12 (gold or au or platinum or pt) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2003/04/14 16:49 |
| S135 | 10 | stop\$4 adj zone near12 (impurities or gold or au or platinum or pt) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2003/04/14 16:51 |

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|------|-----|--|---|----|-----|---------------------|
| S136 | 9 | stop\$4 adj zone near12 (impurities or gold or au or platinum or pt) and (dopant or doping or impurity or impurities) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2003/04/14 17:04 |
| S137 | 33 | (field adj stop\$4 adj zone or buffer) near2 (region or layer) near6 (gold or au or platinum or pt) and silicon and reverse | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2003/04/14 17:12 |
| S138 | 7 | (field adj stop\$4 adj zone or buffer) near2 (region or layer) near6 (gold or au or platinum or pt) and silicon and reverse and forward | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2003/04/14 17:13 |
| S139 | 106 | (US-4053921-\$ or US-4032958-\$ or US-3470036-\$ or US-5844258-\$ or US-5796124-\$ or US-5793066-\$ or US-6043112-\$ or US-5682044-\$ or US-4062032-\$ or US-3337782-\$ or US-4219829-\$ or US-5574297-\$ or US-6313485-\$ or US-6278140-\$ or US-6271545-\$ or US-6218217-\$ or US-6198115-\$ or US-6169299-\$ or US-6111290-\$ or US-6111278-\$ or US-6107649-\$ or US-RE36818-\$ or US-6054728-\$ or US-6020623-\$ or US-5936267-\$ or US-5923055-\$).did. or (US-5894149-\$ or US-5124772-\$ or US-5202750-\$ or US-5210432-\$ or US-5245202-\$ or US-5304821-\$ or US-5306929-\$ or US-5378903-\$ or US-5381026-\$ or US-5381025-\$ or US-5401985-\$ or US-5412228-\$ or US-5444272-\$ or US-5293054-\$ or US-5306930-\$ or US-5407491-\$ or US-5319222-\$ or US-5319221-\$ or US-5336907-\$ or US-5359220-\$ or US-5365477-\$ or US-5371385-\$ or US-4914496-\$ or US-4963972-\$ or US-5068704-\$ or US-5065211-\$ or US-5091766-\$).did. or (US-5679966-\$ or US-5710445-\$ or US-5525816-\$ or US-5569941-\$ or US-5610415-\$ or US-5587594-\$ or US-5637888-\$ or US-5444271-\$ or US-5429953-\$ or US-5461242-\$ or US-5457329-\$ or US-5464994-\$ or US-5471075-\$ or US-5539217-\$ or US-5543639-\$ or US-5528058-\$ or US-5644150-\$ or US-5719413-\$ or US-4717940-\$ or US-5661314-\$ or US-5659185-\$ or US-5684306-\$ or US-RE34158-\$ or US-RE32784-\$ or US-4760431-\$ or US-5477064-\$ or US-5486709-\$).did. or (US-5504351-\$ or US-5705835-\$ or US-5981981-\$ or US-4851889-\$ or US-5498884-\$).did. or (US-20020024056-\$ or US-20010005024-\$).did. or (DE-3932490-\$ or DE-3837748-\$ or DE-3837747-\$ or US-3953243-\$ or US-5528058-\$).did. or (JP-06151825-\$ or JP-06061479-\$ or JP-04240775-\$ or JP-04357875-\$ or JP-04317375-\$ or JP-03116874-\$ or JP-02296370-\$ or JP-03070176-\$ or JP-01270352-\$).did. or (US-5710445-\$ or DE-3932490-\$ or EP-1017093-\$ or US-4642669-\$ or EP-144876-\$ or EP-1097480-\$ or US-5079175-\$ or DE-19909105-\$).did. | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2003/04/14 18:27 |

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|------|------|--|---|----|----|---------------------|
| S140 | 0 | ((US-4053921-\$ or US-4032958-\$ or US-3470036-\$ or US-5844258-\$ or US-5796124-\$ or US-5793066-\$ or US-6043112-\$ or US-5682044-\$ or US-4062032-\$ or US-3337782-\$ or US-4219829-\$ or US-5574297-\$ or US-6313485-\$ or US-6278140-\$ or US-6271545-\$ or US-6218217-\$ or US-6198115-\$ or US-6169299-\$ or US-6111290-\$ or US-6111278-\$ or US-6107649-\$ or US-RE36818-\$ or US-6054728-\$ or US-6020623-\$ or US-5936267-\$ or US-5923055-\$).did. or (US-5894149-\$ or US-5124772-\$ or US-5202750-\$ or US-5210432-\$ or US-5245202-\$ or US-5304821-\$ or US-5306929-\$ or US-5378903-\$ or US-5381026-\$ or US-5381025-\$ or US-5401985-\$ or US-5412228-\$ or US-5444272-\$ or US-5293054-\$ or US-5306930-\$ or US-5407491-\$ or US-5319222-\$ or US-5319221-\$ or US-5336907-\$ or US-5359220-\$ or US-5365477-\$ or US-5371385-\$ or US-4914496-\$ or US-4963972-\$ or US-5068704-\$ or US-5065211-\$ or US-5091766-\$).did. or (US-5679966-\$ or US-5710445-\$ or US-5525816-\$ or US-5569941-\$ or US-5610415-\$ or US-5587594-\$ or US-5637888-\$ or US-5444271-\$ or US-5429953-\$ or US-5461242-\$ or US-5457329-\$ or US-5464994-\$ or US-5471075-\$ or US-5539217-\$ or US-5543639-\$ or US-5528058-\$ or US-5644150-\$ or US-5719413-\$ or US-4717940-\$ or US-5661314-\$ or US-5659185-\$ or US-5684306-\$ or US-RE34158-\$ or US-RE32784-\$ or US-4760431-\$ or US-5477064-\$ or US-5486709-\$).did. or (US-5504351-\$ or US-5705835-\$ or US-5981981-\$ or US-4851889-\$ or US-5498884-\$).did. or (US-20020024056-\$ or US-20010005024-\$).did. or (DE-3932490-\$ or DE-3837748-\$ or DE-3837747-\$ or US-3953243-\$ or US-5528058-\$).did. or (JP-06151825-\$ or JP-06061479-\$ or JP-04240775-\$ or JP-04357875-\$ or JP-04317375-\$ or JP-03116874-\$ or JP-02296370-\$ or JP-03070176-\$ or JP-01270352-\$).did. or (US-5710445-\$ or DE-3932490-\$ or EP-1017093-\$ or US-4642669-\$ or EP-144876-\$ or EP-1097480-\$ or US-5079175-\$ or DE-19909105-\$).did.) and stephanie.in. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2003/04/14 18:27 |
| S141 | 1189 | stephanie.in. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2003/04/14 18:27 |
| S142 | 61 | stephanie.in. and semiconductor | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2003/04/14 18:28 |
| S143 | 1 | stephanie.in. and semiconductor and sulfur | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2003/04/14 18:28 |
| S144 | 2 | ep-760528-\$\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2003/04/14 19:28 |
| S145 | 0 | de-19832310-\$\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2003/04/14 19:28 |

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| S146 | 0 | de-019832310\$-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2003/04/14 19:28 |
| S147 | 219 | stephani.in. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2003/04/14 19:29 |
| S148 | 109 | stephani.in. | DERWENT | OR | ON | 2003/04/14 19:29 |
| S149 | 0 | stephani.in. and dietrich.in. | DERWENT | OR | ON | 2003/04/14 19:31 |
| S150 | 3 | buchwald.in. and melvin.in. | US-PGPUB; USPAT; DERWENT | OR | ON | 2003/04/14 19:30 |
| S151 | 53 | stephani-d.in. | DERWENT | OR | ON | 2003/04/14 19:35 |
| S152 | 362 | bauer-j.in. | DERWENT | OR | ON | 2003/04/14 19:35 |
| S153 | 2 | ep-621640\$-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2003/11/07 18:28 |
| S154 | 4 | "761240".ap. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2003/11/07 18:32 |
| S155 | 1 | "761240".ap. and stop adj zone and emitter adj region | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2003/11/07 18:39 |
| S156 | 2 | ep-760528\$-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2003/11/07 18:39 |

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|------|-----|--|---|----|-----|---------------------|
| S157 | 2 | ep-760528\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2003/11/08 11:34 |
| S158 | 21 | emitter near12 (stop adj zone junction adj termination) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2003/11/08 11:41 |
| S159 | 6 | emitter near12 (stop adj zone junction adj termination) and (beryllium be zinc zn nickel ni cobalt co magnesium mg tin sn indium) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2003/11/08 12:07 |
| S160 | 114 | (US-5293054-\$ or US-5245202-\$ or US-5210432-\$ or US-5371385-\$ or US-5981981-\$ or US-RE34158-\$ or US-4219829-\$ or US-5407491-\$ or US-5574297-\$ or US-6313485-\$ or US-6278140-\$ or US-6271545-\$ or US-6218217-\$ or US-6198115-\$ or US-6169299-\$ or US-6111290-\$ or US-6111278-\$ or US-4851889-\$ or US-RE32784-\$ or US-4760431-\$ or US-4717940-\$ or US-5068704-\$ or US-5065211-\$ or US-4963972-\$ or US-4914496-\$ or US-5202750-\$).did. or (US-5124772-\$ or US-5091766-\$ or US-5306930-\$ or US-5306929-\$ or US-5304821-\$ or US-6107649-\$ or US-RE36818-\$ or US-6054728-\$ or US-6020623-\$ or US-5936267-\$ or US-5923055-\$ or US-5894149-\$ or US-5844258-\$ or US-5796124-\$ or US-5793066-\$ or US-6043112-\$ or US-5682044-\$ or US-5464994-\$ or US-5381025-\$ or US-4062032-\$ or US-4053921-\$ or US-4032958-\$ or US-3470036-\$ or US-5444271-\$ or US-5429953-\$ or US-5381026-\$ or US-5336907-\$).did. or (US-5461242-\$ or US-5401985-\$ or US-5365477-\$ or US-5378903-\$ or US-3337782-\$ or US-5319222-\$ or US-5319221-\$ or US-5359220-\$ or US-5457329-\$ or US-5444272-\$ or US-5412228-\$ or US-5486709-\$ or US-5498884-\$ or US-5504351-\$ or US-5525816-\$ or US-5528058-\$ or US-5539217-\$ or US-5543639-\$ or US-5659185-\$ or US-5644150-\$ or US-5637888-\$ or US-5610415-\$ or US-5587594-\$ or US-5569941-\$ or US-5719413-\$ or US-5710445-\$ or US-5705835-\$).did. or (US-5684306-\$ or US-5679966-\$ or US-5661314-\$ or US-5477064-\$ or US-5471075-\$).did. or (US-20030197247-\$ or US-20030122151-\$ or US-20010005024-\$ or US-20030094857-\$ or US-20030006497-\$ or US-20020024056-\$).did. or (EP-760528-\$ or EP-621640-\$ or US-5528058-\$ or DE-3932490-\$ or DE-3837748-\$ or DE-3837747-\$ or US-3953243-\$).did. or (JP-04317375-\$ or JP-04240775-\$ or JP-03116874-\$ or JP-03070176-\$ or JP-02296370-\$ or JP-01270352-\$ or JP-06151825-\$ or JP-06061479-\$ or JP-04357875-\$).did. or (EP-144876-\$ or EP-1097480-\$ or DE-19531369-\$ or EP-621640-\$ or EP-1017093-\$ or US-4642669-\$ or DE-19909105-\$ or US-5079175-\$ or US-5710445-\$ or DE-3932490-\$).did. | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2003/11/08 11:52 |
| S161 | 16 | power adj semiconductor.ti,ab,clm. and stop adj (layer zone) and emitter | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2003/11/08 11:53 |
| S162 | 51 | power adj semiconductor.ti,ab,clm. and stop adj (layer zone) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2003/11/08 12:07 |

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|------|------|--|---|----|-----|---------------------|
| S163 | 20 | power adj semiconductor.ti,ab,clm. and stop adj (layer zone) and (beryllium be zinc zn nickel ni cobalt co magnesium mg tin sn indium) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2003/11/08 12:13 |
| S164 | 1562 | ((257/110) or (257/133) or (257/138) or (257/139) or (257/144) or (257/147) or (257/152) or (257/163) or (257/164) or (257/165) or (257/341) or (257/342)).CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2003/11/08 12:15 |
| S165 | 10 | ((257/110) or (257/133) or (257/138) or (257/139) or (257/144) or (257/147) or (257/152) or (257/163) or (257/164) or (257/165) or (257/341) or (257/342)).CCLS.) and stop adj (layer zone) and (be beryllium cobalt magnesium mg zinc zn nickel ni sn tin indium sulfur selenium titanium ti) | US-PGPUB; USPAT | OR | OFF | 2003/11/08 12:22 |
| S166 | 486 | stop adj (layer zone) near15 (be beryllium cobalt magnesium mg zinc zn nickel ni sn tin indium sulfur selenium titanium ti) | US-PGPUB; USPAT | OR | OFF | 2003/11/08 12:22 |
| S167 | 436 | stop adj (layer zone) near6 (be beryllium cobalt magnesium mg zinc zn nickel ni sn tin indium sulfur selenium titanium ti) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2003/11/08 12:23 |
| S168 | 54 | stop adj (layer zone) near6 (be beryllium cobalt magnesium mg zinc zn nickel ni sn tin indium sulfur selenium titanium ti) and switch\$3 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2003/11/08 13:47 |
| S169 | 0 | WO-0004598\$-\$.DID. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2003/11/08 13:47 |
| S170 | 1 | WO-200004598\$-\$.DID. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2003/11/08 16:38 |
| S171 | 2 | de-3917769\$-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2003/11/08 16:55 |
| S172 | 1 | ("6043112").PN. | USPAT; USOCR | OR | OFF | 2003/11/08 17:17 |
| S173 | 551 | emitter near3 drain and collector near3 source | USPAT | OR | OFF | 2003/11/08 17:18 |
| S174 | 460 | emitter near3 drain and collector near3 source and bipolar | USPAT | OR | OFF | 2003/11/08 17:18 |
| S175 | 268 | emitter near3 drain and collector near3 source and bipolar and (switch switching) | USPAT | OR | OFF | 2003/11/08 17:19 |

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|------|-----|---|---|----|-----|---------------------|
| S176 | 254 | emitter near3 drain near6 collector near3 source and bipolar and (switch switching) | USPAT | OR | OFF | 2003/11/08 17:19 |
| S177 | 116 | (US-5644150-\$ or US-5637888-\$ or US-5587594-\$ or US-5610415-\$ or US-5569941-\$ or US-5543639-\$ or US-5528058-\$ or US-5539217-\$ or US-5407491-\$ or US-5525816-\$ or US-5504351-\$ or US-5498884-\$ or US-5659185-\$ or US-5661314-\$ or US-5477064-\$ or US-5471075-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5719413-\$ or US-5710445-\$ or US-4219829-\$ or US-5486709-\$ or US-5461242-\$ or US-5464994-\$ or US-5491351-\$).did. or (US-6441408-\$ or US-5371385-\$ or US-5359220-\$ or US-5365477-\$ or US-3337782-\$ or US-5796124-\$ or US-5793066-\$ or US-6043112-\$ or US-5682044-\$ or US-5457329-\$ or US-5444272-\$ or US-5444271-\$ or US-5429953-\$ or US-5412228-\$ or US-5381026-\$ or US-5401985-\$ or US-5378903-\$ or US-5381025-\$ or US-5306929-\$ or US-5293054-\$ or US-5245202-\$ or US-5306930-\$ or US-5981981-\$ or US-RE34158-\$ or US-5304821-\$ or US-5336907-\$ or US-5319222-\$).did. or (US-5319221-\$ or US-5202750-\$ or US-5210432-\$ or US-5091766-\$ or US-5124772-\$ or US-5065211-\$ or US-5068704-\$ or US-4963972-\$ or US-4914496-\$ or US-4851889-\$ or US-RE32784-\$ or US-4760431-\$ or US-4717940-\$ or US-4053921-\$ or US-4062032-\$ or US-4032958-\$ or US-5574297-\$ or US-3470036-\$ or US-6313485-\$ or US-6278140-\$ or US-6271545-\$ or US-6218217-\$ or US-6198115-\$ or US-6169299-\$ or US-6111290-\$ or US-6111278-\$ or US-6107649-\$).did. or (US-RE36818-\$ or US-6054728-\$ or US-6020623-\$ or US-5936267-\$ or US-5923055-\$ or US-5894149-\$ or US-5844258-\$).did. or (US-20030122151-\$ or US-20030197247-\$ or US-20030006497-\$ or US-20030094857-\$ or US-20020024056-\$ or US-20010005024-\$).did. or (EP-760528-\$ or EP-621640-\$ or DE-3932490-\$ or DE-3837748-\$ or DE-3837747-\$ or US-3953243-\$ or US-5528058-\$).did. or (JP-01270352-\$ or JP-02296370-\$ or JP-06061479-\$ or JP-04317375-\$ or JP-04240775-\$ or JP-03116874-\$ or JP-03070176-\$ or JP-06151825-\$ or JP-04357875-\$).did. or (US-4642669-\$ or EP-1017093-\$ or US-5079175-\$ or DE-19909105-\$ or EP-144876-\$ or EP-1097480-\$ or DE-19531369-\$ or EP-621640-\$ or US-5710445-\$ or DE-3932490-\$).did. | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2004/08/09 09:51 |
| S178 | 2 | ((US-5644150-\$ or US-5637888-\$ or US-5587594-\$ or US-5610415-\$ or US-5569941-\$ or US-5543639-\$ or US-5528058-\$ or US-5539217-\$ or US-5407491-\$ or US-5525816-\$ or US-5504351-\$ or US-5498884-\$ or US-5659185-\$ or US-5661314-\$ or US-5477064-\$ or US-5471075-\$ or US-5679966-\$ or US-5684306-\$ or US-5705835-\$ or US-5719413-\$ or US-5710445-\$ or US-4219829-\$ or US-5486709-\$ or US-5461242-\$ or US-5464994-\$ or US-5491351-\$).did. or (US-6441408-\$ or US-5371385-\$ or US-5359220-\$ or US-5365477-\$ or US-3337782-\$ or US-5796124-\$ or US-5793066-\$ or US-6043112-\$ or US-5682044-\$ or US-5457329-\$ or US-5444272-\$ or US-5444271-\$ or US-5429953-\$ or US-5412228-\$ or US-5381026-\$ or US-5401985-\$ or US-5378903-\$ or US-5381025-\$ or US-5306929-\$ or US-5293054-\$ or US-5245202-\$ or US-5306930-\$ or US-5981981-\$ or US-RE34158-\$ or US-5304821-\$ or US-5336907-\$ or US-5319222-\$).did. or (US-5319221-\$ or US-5202750-\$ or US-5210432-\$ or US-5091766-\$ or US-5124772-\$ or US-5065211-\$ or US-5068704-\$ or US-4963972-\$ or US-4914496-\$ or US-4851889-\$ or US-RE32784-\$ or US-4760431-\$ or US-4717940-\$ or US-4053921-\$ or US-4062032-\$ or US-4032958-\$ or US-5574297-\$ or US-3470036-\$ or US-6313485-\$ or US-6278140-\$ or US-6271545-\$ or US-6218217-\$ or US-6198115-\$ or US-6169299-\$ or US-6111290-\$ or US-6111278-\$ or US-6107649-\$).did. or (US-RE36818-\$ or US-6054728-\$ or US-6020623-\$ or US-5936267-\$ or US-5923055-\$ or US-5894149-\$ or US-5844258-\$).did. or (US-20030122151-\$ or US-20030197247-\$ or US-20030006497-\$ or US-20030094857-\$ or US-20020024056-\$ or US-20010005024-\$).did. or (EP-760528-\$ or EP-621640-\$ or DE-3932490-\$ or DE-3837748-\$ or DE-3837747-\$ or US-3953243-\$ or US-5528058-\$).did. or (JP-01270352-\$ or JP-02296370-\$ or JP-06061479-\$ or JP-04317375-\$ or JP-04240775-\$ or JP-03116874-\$ or JP-03070176-\$ or JP-06151825-\$ or JP-04357875-\$).did. or (US-4642669-\$ or EP-1017093-\$ or US-5079175-\$ or DE-19909105-\$ or EP-144876-\$ or EP-1097480-\$ or DE-19531369-\$ or EP-621640-\$ or US-5710445-\$ or DE-3932490-\$).did.) and stephani.in. | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2004/08/09 10:18 |

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| S179 | 2 | ("5455911").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/09 10:18 |
| S180 | 2 | ("6455911").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/09 10:27 |
| S181 | 510 | stop adj zone | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/09 10:27 |
| S182 | 46 | stop adj zone.ti. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/09 11:13 |
| S183 | 23 | (acceptor donor) adj ionization adj energ\$3 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/09 11:36 |
| S184 | 1 | (acceptor donor) adj ionization adj energ\$3 near8 (oxygen selenium sulfur) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/09 11:48 |
| S185 | 62 | stop adj zone and GaP | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/09 11:56 |
| S186 | 4 | stop adj zone near15 (selenium sulfur oxygen) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/09 11:59 |

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| S187 | 24 | stop adj zone and (selenium sulfur oxygen) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/09 12:06 |
| S188 | 2 | ep-621640\$-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/09 12:44 |
| S189 | 2 | (acceptor donor) adj ionization adj energ\$3 near4 (silicon "si") | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/09 12:24 |
| S190 | 1 | stop adj zone near12 boron | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/09 12:25 |
| S191 | 0 | znse and (stop stopping) adj zone and (nitrogen "N") near15 zone | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/09 12:46 |
| S192 | 5738 | channel adj stop (stop stopping) adj zone | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2004/08/09 12:51 |
| S193 | 5170 | channel adj stop (stop stopping) adj zone and breakdown adj voltage | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2004/08/09 12:51 |
| S194 | 5168 | channel adj stop (stop stopping) adj zone and breakdown adj voltage and "257"/\$9.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2004/08/09 12:52 |
| S195 | 620 | (channel adj stop (stop stopping) adj zone) and breakdown adj voltage and "257"/\$9.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2004/08/09 12:53 |
| S196 | 0 | (channel adj stop (stop stopping) adj zone) and breakdown adj voltage and "257"/\$9.ccls. and znse | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2004/08/09 12:53 |

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| S197 | 0 | "de-1983231.07"\$-\$\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/09 14:40 |
| S198 | 7 | de-1983231\$-\$\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/09 14:40 |
| S199 | 4 | "761240".ap. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/09 14:41 |
| S200 | 881 | bauer.in. and stop | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/09 14:41 |
| S201 | 3 | bauer.in. and stop adj zone and brunner.in. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 07:52 |
| S202 | 10 | wo-20004598\$-\$\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 07:54 |
| S203 | 1 | wo-200004598\$-\$\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 08:09 |
| S204 | 0 | ((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and acceptor adj ionisation adj energ\$3 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 08:11 |
| S205 | 2 | ((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and ion isation adj energ\$3 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 08:18 |

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| S206 | 978 | ((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and (boron Al Ga indium ni nickel oxygen) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 08:21 |
| S207 | 700 | ((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and (be beryllium cesium cs barium ba sulfur s mn manganese ag silver cd cadmium pt platinum si silicon zn zinc au gold co cobalt v vanadium ni nickel molybdenum mo hg mercury sr strontium germanium ge cu copper potassium k sn tin w tungsten pb lead o oxygen iron fe) near12 (doping doped impurity impurities) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 08:30 |
| S208 | 679 | ((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and (be beryllium cesium cs barium ba sulfur s mn manganese ag silver cd cadmium pt platinum si silicon zn zinc au gold co cobalt v vanadium ni nickel molybdenum mo hg mercury sr strontium germanium ge cu copper potassium k sn tin w tungsten pb lead o oxygen iron fe) near12 (doping doped impurity impurities) and silicon | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 08:30 |
| S209 | 586 | ((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and (be beryllium cesium cs barium ba sulfur s mn manganese ag silver cd cadmium pt platinum si silicon zn zinc au gold co cobalt v vanadium ni nickel molybdenum mo hg mercury sr strontium germanium ge cu copper potassium k sn tin w tungsten pb lead o oxygen iron fe) near12 (doping doped impurity impurities) and silicon and "257"/\$9.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 08:33 |
| S210 | 581 | ((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and (be beryllium cesium cs barium ba sulfur s mn manganese ag silver cd cadmium pt platinum si silicon zn zinc au gold co cobalt vanadium ni nickel molybdenum mo hg mercury sr strontium germanium ge cu copper potassium sn tin tungsten pb lead oxygen iron fe) near12 (doping doped impurity impurities) and silicon and "257"/\$9.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 08:34 |
| S211 | 568 | ((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and (be beryllium cesium cs barium ba sulfur mn manganese ag silver cd cadmium pt platinum si silicon zn zinc au gold co cobalt vanadium ni nickel molybdenum mo hg mercury sr strontium germanium ge cu copper potassium sn tin tungsten pb oxygen iron fe) near12 (doping doped impurity impurities) and silicon and "257"/\$9.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 08:36 |
| S212 | 110 | ((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and (be beryllium cesium cs barium ba sulfur mn manganese ag silver cd cadmium pt platinum si silicon zn zinc au gold co cobalt vanadium ni nickel molybdenum mo hg mercury sr strontium germanium ge cu copper potassium sn tin tungsten pb oxygen iron fe) near12 (doping doped impurity impurities) and silicon and "257"/\$9.ccls. and emitter | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 09:23 |
| S213 | 8 | ((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and (be beryllium cesium cs barium ba sulfur mn manganese ag silver cd cadmium pt platinum si silicon zn zinc au gold co cobalt vanadium ni nickel molybdenum mo hg mercury sr strontium germanium ge cu copper potassium sn tin tungsten pb oxygen iron fe) near12 (doping doped impurity impurities) and silicon and "257"/\$9.ccls. and emitter and power.ti,ab,clm. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 08:41 |
| S214 | 5 | ((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and (be beryllium cesium cs barium ba sulfur mn manganese ag silver cd cadmium pt platinum si zn zinc au gold co cobalt vanadium ni nickel molybdenum mo hg mercury sr strontium germanium ge cu copper potassium sn tin tungsten pb oxygen iron fe) near12 (doping doped impurity impurities) and silicon and "257"/\$9.ccls. and emitter and power.ti,ab,clm. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 09:07 |

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| S215 | 5 | ((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and (be beryllium cesium cs barium ba sulfur mn manganese ag silver cd cadmium pt platinum si zn zinc au gold co cobalt vanadium ni nickel molybdenum mo hg mercury se selenium sr strontium germanium ge cu copper potassium sn tin tungsten pb oxygen iron fe) near12 (doping doped impurity impurities) and silicon and "257"/\$9.ccls. and emitter and power.ti,ab,clm. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 09:10 |
| S216 | 0 | ((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and (ni nickel se selenium cu copper tellurium te oxygen iron fe) near12 (doping doped impurity impurities) and germanium and "257"/\$9.ccls. and emitter and power.ti,ab,clm. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 09:13 |
| S217 | 1 | ((stop stopping) adj (layer zone region) channel adj stop) near12 (doped doping impurity impurities) and (ni nickel se selenium cu copper tellurium te oxygen iron fe cr chromium) near12 (doping doped impurity impurities) and germanium and "257"/\$9.ccls. and emitter and power.ti,ab,clm. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 09:17 |
| S218 | 2 | de-3917769\$-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 20:07 |
| S219 | 110 | ((stop stopping) adj zone channel adj stop) near12 (doped doping impurity impurities) and (be beryllium cesium cs barium ba sulfur mn manganese ag silver cd cadmium pt platinum si silicon zn zinc au gold co cobalt vanadium ni nickel molybdenum mo hg mercury sr strontium germanium ge cu copper potassium sn tin tungsten te tellurium pb oxygen iron fe) near12 (doping doped impurity impurities) and silicon and "257"/\$9.ccls. and emitter | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 15:44 |
| S220 | 68 | (stop stopping) adj (layer zone) and thyristor.ti,ab,clm. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 15:57 |
| S221 | 68 | (stop stopping) adj (layer zone) and thyristor.ti,ab,clm. and (stop stopping) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 18:02 |
| S222 | 5469 | GTO | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 18:04 |
| S223 | 4 | "761240".ap. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 20:26 |

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| S224 | 0 | de-19832310\$-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 20:27 |
| S225 | 0 | de-019832310\$-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 20:27 |
| S226 | 0 | ("761240.ap.").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 20:46 |
| S227 | 4 | "761240".ap. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 20:46 |
| S228 | 134 | (US-5796124-\$ or US-5844258-\$ or US-5319222-\$ or US-5319221-\$ or US-5668385-\$ or US-5719413-\$ or US-5705835-\$ or US-5710445-\$ or US-6043112-\$ or US-5682044-\$ or US-6441408-\$ or US-6660569-\$ or US-6703294-\$ or US-6696705-\$ or US-5793066-\$ or US-5202750-\$ or US-5245202-\$ or US-5293054-\$ or US-5306929-\$ or US-5306930-\$ or US-5981981-\$ or US-RE34158-\$ or US-5304821-\$ or US-4032958-\$ or US-4062032-\$ or US-4053921-\$).did. or (US-4717940-\$ or US-4760431-\$ or US-RE32784-\$ or US-4851889-\$ or US-4914496-\$ or US-4963972-\$ or US-5068704-\$ or US-5065211-\$ or US-5124772-\$ or US-5091766-\$ or US-5210432-\$ or US-5574297-\$ or US-6107649-\$ or US-6111278-\$ or US-6111290-\$ or US-6169299-\$ or US-6198115-\$ or US-6218217-\$ or US-6271545-\$ or US-6278140-\$ or US-6313485-\$ or US-5894149-\$ or US-5923055-\$ or US-5936267-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$).did. or (US-5336907-\$ or US-5461242-\$ or US-5444272-\$ or US-5457329-\$ or US-5444271-\$ or US-5429953-\$ or US-5412228-\$ or US-5381026-\$ or US-5401985-\$ or US-5378903-\$ or US-5381025-\$ or US-3470036-\$ or US-3337782-\$ or US-5365477-\$ or US-5371385-\$ or US-5359220-\$ or US-5464994-\$ or US-5543639-\$ or US-5528058-\$ or US-5539217-\$ or US-5407491-\$ or US-5525816-\$ or US-5504351-\$ or US-5498884-\$ or US-5679966-\$ or US-5684306-\$ or US-5486709-\$).did. or (US-5491351-\$ or US-5477064-\$ or US-5569941-\$ or US-5471075-\$ or US-5610415-\$ or US-5659185-\$ or US-5644150-\$ or US-5637888-\$ or US-4219829-\$ or US-5661314-\$ or US-5587594-\$).did. or (US-20030122151-\$ or US-20030197247-\$ or US-20030006497-\$ or US-20030094857-\$ or US-20040084724-\$ or US-20040137665-\$ or US-20040080015-\$ or US-20010005036-\$ or US-20020024056-\$ or US-20010005024-\$).did. or (DE-3932490-\$ or DE-3837748-\$ or DE-3837747-\$ or US-3953243-\$ or EP-760528-\$ or EP-621640-\$ or DE-10214176-\$ or DE-3917769-\$ or US-5528058-\$).did. or (JP-06151825-\$ or JP-06061479-\$ or JP-04357875-\$ or JP-04317375-\$ or JP-04240775-\$ or JP-03116874-\$ or JP-03070176-\$ or JP-02296370-\$ or JP-01270352-\$).did. or (EP-1017093-\$ or DE-3932490-\$ or EP-144876-\$ or EP-1097480-\$ or DE-19531369-\$ or EP-621640-\$ or DE-10243758-\$ or DE-10214176-\$ or DE-10048165-\$ or DE-19731495-\$ or EP-347778-\$ or WO-200203469-\$ or EP-1017093-\$ or DE-2734726-\$ or DE-3917769-\$ or US-5710445-\$ or US-4642669-\$ or US-5079175-\$ or DE-19909105-\$).did. | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2004/08/10 20:53 |

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| S229 | 442 | ((257/107) or (257/155) or (257/156)).CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2004/08/10 20:53 |
| S230 | 616 | ((257/107) or (257/109) or (257/110) or (257/155) or (257/156)).CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2004/08/11 09:52 |
| S231 | 0 | ((((257/107) or (257/109) or (257/110) or (257/155) or (257/156)).CCLS.) and ionization adj energ\$3 near15 (stop stopping) adj (zone region layer) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 20:56 |
| S232 | 1 | ((((257/107) or (257/109) or (257/110) or (257/155) or (257/156)).CCLS.) and (sulfur s selenium se oxygen tellurium te zn zinc mn manganese ionization adj energ\$3) near15 (stop stopping) adj (zone region layer) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 20:58 |
| S233 | 0 | ("DOPANTNEAR4SULFURNEAR12SILICON").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2004/08/10 21:14 |
| S234 | 95 | sulfur near12 (impurities impurity ion adj implantation) and silicon adj substrate | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 21:15 |
| S235 | 60 | sulfur near4 (impurities impurity ion adj implantation) and silicon adj substrate | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/10 21:15 |
| S236 | 774 | ((257/107) or (257/109) or (257/110) or (257/155) or (257/156) or (257/163) or (257/164)).CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2004/08/11 09:56 |
| S237 | 799 | ((257/107) or (257/109) or (257/110) or (257/155) or (257/156) or (257/163) or (257/164) or (257/165)).CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2004/08/11 09:58 |
| S238 | 972 | ((257/107) or (257/109) or (257/110) or (257/137) or (257/138) or (257/155) or (257/156) or (257/163) or (257/164) or (257/165)).CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2004/08/11 09:58 |
| S239 | 44 | ((((257/107) or (257/109) or (257/110) or (257/137) or (257/138) or (257/155) or (257/156) or (257/163) or (257/164) or (257/165)).CCLS.) and (deep ionization adj energ\$3) near6 (dop\$3 impurit\$3) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/11 10:01 |
| S240 | 7 | "761241".ap. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/08/11 10:27 |

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| S241 | 174 | (US-5429953-\$ or US-5412228-\$ or US-5401985-\$ or US-5381026-\$ or US-5381025-\$ or US-5378903-\$ or US-5371385-\$ or US-5365477-\$ or US-5359220-\$ or US-5336907-\$ or US-5319222-\$ or US-5319221-\$ or US-5306930-\$ or US-5306929-\$ or US-5304821-\$ or US-5293054-\$ or US-5684306-\$ or US-5679966-\$ or US-5668385-\$ or US-5661314-\$ or US-5543639-\$ or US-5719413-\$ or US-5710445-\$ or US-5705835-\$ or US-5569941-\$ or US-5587594-\$).did. or (US-5610415-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5539217-\$ or US-5528058-\$ or US-5525816-\$ or US-5504351-\$ or US-5498884-\$ or US-5491351-\$ or US-5486709-\$ or US-5477064-\$ or US-5471075-\$ or US-5464994-\$ or US-5461242-\$ or US-5457329-\$ or US-5444272-\$ or US-5444271-\$ or US-3470036-\$ or US-3337782-\$ or US-5981981-\$ or US-RE34158-\$ or US-4219829-\$ or US-5684323-\$ or US-5407491-\$ or US-5574297-\$ or US-6313485-\$).did. or (US-6278140-\$ or US-6271545-\$ or US-6218217-\$ or US-6198115-\$ or US-6169299-\$ or US-6111290-\$ or US-5936267-\$ or US-6111278-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$ or US-5245202-\$ or US-5210432-\$ or US-5202750-\$ or US-5124772-\$ or US-5091766-\$ or US-5068704-\$ or US-5065211-\$ or US-4963972-\$ or US-4914496-\$ or US-4851889-\$).did. or (US-RE32784-\$ or US-4760431-\$ or US-4717940-\$ or US-4062032-\$ or US-4053921-\$ or US-4032958-\$ or US-6660569-\$ or US-6441408-\$ or US-5682044-\$ or US-6043112-\$ or US-5629535-\$ or US-5757033-\$ or US-6049108-\$ or US-6104043-\$ or US-6242766-\$ or US-6268639-\$ or US-6274892-\$ or US-6380569-\$ or US-6407412-\$ or US-6420774-\$ or US-6437383-\$ or US-6501099-\$ or US-6555848-\$ or US-6703647-\$ or US-6734462-\$ or US-6756612-\$ or US-6696705-\$).did. or (US-6703294-\$ or US-3577046-\$ or US-3697827-\$ or US-3739236-\$ or US-3988771-\$ or US-4040170-\$ or US-4081818-\$ or US-4089024-\$ or US-4107731-\$ or US-4520552-\$ or US-4559551-\$ or US-4825266-\$ or US-4910573-\$ or US-4969028-\$ or US-5083185-\$ or US-5144401-\$ or US-5151766-\$ or US-5204541-\$ or US-5262336-\$ or US-5291040-\$ or US-5311042-\$ or US-5483087-\$ or US-5550392-\$ or US-5591991-\$).did. or (US-20010005024-\$ or US-20020024056-\$ or US-20010005036-\$ or US-20030006497-\$ or US-20030094857-\$ or US-20030122151-\$ or US-20030197247-\$ or US-20040080015-\$ or US-20040137665-\$ or US-20040084724-\$).did. or (US-5528058-\$ or DE-10214176-\$ or DE-3917769-\$ or EP-621640-\$ or EP-760528-\$ or US-3953243-\$ or DE-3837747-\$ or DE-3837748-\$ or DE-3932490-\$).did. or (JP-06151825-\$ or JP-06061479-\$ or JP-04357875-\$ or JP-04317375-\$ or JP-04240775-\$ or JP-03116874-\$ or JP-03070176-\$ or JP-02296370-\$ or JP-01270352-\$).did. or (US-5710445-\$ or WO-200203469-\$ or DE-10214176-\$ or DE-10243758-\$ or DE-3917769-\$ or DE-10048165-\$ or EP-621640-\$ or DE-19531369-\$ or EP-1097480-\$ or EP-144876-\$ or DE-3932490-\$ or EP-1017093-\$ or DE-2734726-\$ or US-5079175-\$ or DE-19909105-\$ or EP-1017093-\$ or US-4642669-\$ or EP-347778-\$ or DE-19731495-\$).did. | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2004/08/11 10:28 |
| S242 | 24 | ((US-5429953-\$ or US-5412228-\$ or US-5401985-\$ or US-5381026-\$ or US-5381025-\$ or US-5378903-\$ or US-5371385-\$ or US-5365477-\$ or US-5359220-\$ or US-5336907-\$ or US-5319222-\$ or US-5319221-\$ or US-5306930-\$ or US-5306929-\$ or US-5304821-\$ or US-5293054-\$ or US-5684306-\$ or US-5679966-\$ or US-5668385-\$ or US-5661314-\$ or US-5543639-\$ or US-5719413-\$ or US-5710445-\$ or US-5705835-\$ or US-5569941-\$ or US-5587594-\$).did. or (US-5610415-\$ or US-5637888-\$ or US-5644150-\$ or US-5659185-\$ or US-5539217-\$ or US-5528058-\$ or US-5525816-\$ or US-5504351-\$ or US-5498884-\$ or US-5491351-\$ or US-5486709-\$ or US-5477064-\$ or US-5471075-\$ or US-5464994-\$ or US-5461242-\$ or US-5457329-\$ or US-5444272-\$ or US-5444271-\$ or US-3470036-\$ or US-3337782-\$ or US-5981981-\$ or US-RE34158-\$ or US-4219829-\$ or US-5684323-\$ or US-5407491-\$ or US-5574297-\$ or US-6313485-\$).did. or (US-6278140-\$ or US-6271545-\$ or US-6218217-\$ or US-6198115-\$ or US-6169299-\$ or US-6111290-\$ or US-5936267-\$ or US-6111278-\$ or US-5793066-\$ or US-5796124-\$ or US-5844258-\$ or US-5894149-\$ or US-5923055-\$ or US-6020623-\$ or US-6054728-\$ or US-RE36818-\$ or US-6107649-\$ or US-5245202-\$ or US-5210432-\$ or US-5202750-\$ or US-5124772-\$ or US-5091766-\$ or US-5068704-\$ or US-5065211-\$ or US-4963972-\$ or US-4914496-\$ or US-4851889-\$).did. or (US-RE32784-\$ or US-4760431-\$ or US-4717940-\$ or US-4062032-\$ or US-4053921-\$ or US-4032958-\$ or US- | EPO; DERWENT | OR | OFF | 2004/08/11 10:29 |

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| | | 6660569-\$ or US-6441408-\$ or US-5682044-\$ or US-6043112-\$ or US-5629535-\$ or US-5757033-\$ or US-6049108-\$ or US-6104043-\$ or US-6242766-\$ or US-6268639-\$ or US-6274892-\$ or US-6380569-\$ or US-6407412-\$ or US-6420774-\$ or US-6437383-\$ or US-6501099-\$ or US-6555848-\$ or US-6703647-\$ or US-6734462-\$ or US-6756612-\$ or US-6696705-\$).did. or (US-6703294-\$ or US-3577046-\$ or US-3697827-\$ or US-3739236-\$ or US-3988771-\$ or US-4040170-\$ or US-4081818-\$ or US-4089024-\$ or US-4107731-\$ or US-4520552-\$ or US-4559551-\$ or US-4825266-\$ or US-4910573-\$ or US-4969028-\$ or US-5083185-\$ or US-5144401-\$ or US-5151766-\$ or US-5204541-\$ or US-5262336-\$ or US-5291040-\$ or US-5311042-\$ or US-5483087-\$ or US-5550392-\$ or US-5591991-\$).did. or (US-20010005024-\$ or US-20020024056-\$ or US-20010005036-\$ or US-20030006497-\$ or US-20030094857-\$ or US-20030122151-\$ or US-20030197247-\$ or US-20040080015-\$ or US-20040137665-\$ or US-20040084724-\$).did. or (US-5528058-\$ or DE-10214176-\$ or DE-3917769-\$ or EP-621640-\$ or EP-760528-\$ or US-3953243-\$ or DE-3837747-\$ or DE-3837748-\$ or DE-3932490-\$).did. or (JP-06151825-\$ or JP-06061479-\$ or JP-04357875-\$ or JP-04317375-\$ or JP-04240775-\$ or JP-03116874-\$ or JP-03070176-\$ or JP-02296370-\$ or JP-01270352-\$).did. or (US-5710445-\$ or WO-200203469-\$ or DE-10214176-\$ or DE-10243758-\$ or DE-3917769-\$ or DE-10048165-\$ or EP-621640-\$ or DE-19531369-\$ or EP-1097480-\$ or EP-144876-\$ or DE-3932490-\$ or EP-1017093-\$ or DE-2734726-\$ or US-5079175-\$ or DE-19909105-\$ or EP-1017093-\$ or US-4642669-\$ or EP-347778-\$ or DE-19731495-\$).did.) | | | | |
| S273 | 2 | "5668385".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/05/20 10:49 |
| S274 | 2 | de-3917769-\$\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/05/20 09:33 |
| S275 | 1380 | ((257/107) or (257/109) or (257/110) or (257/137) or (257/138) or (257/155) or (257/156) or (257/163) or (257/164)).CQLS. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/05/20 10:50 |
| S276 | 0 | S275 and stop adj zone near8 temperature near8 threshold | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/05/20 10:51 |
| S277 | 0 | S275 and emitter near8 temperature near8 threshold | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/05/20 10:51 |
| S278 | 11 | "5668385" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/02/03 19:18 |

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| S279 | 2 | ("5668385").PN. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/02/03 19:20 |
| S280 | 2 | de-3917769\$-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/02/04 22:39 |
| S281 | 2 | ("4910573").PN. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/02/03 19:23 |
| S282 | 1429 | ((257/107) or (257/109) or (257/110) or (257/137) or (257/138) or (257/155) or (257/156) or (257/163) or (257/164)).CCLS. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/02/04 22:41 |
| S283 | 92 | S282 and emitter and (power high-voltage high adj voltage) and (gto mct igbt) and (selenium se s sulfur) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/02/04 22:44 |
| S284 | 4 | S282 and emitter and (power high-voltage high adj voltage) and (gto mct igbt) and (selenium se) and sulfur | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/02/04 22:44 |
| S285 | 6 | "761240".ap. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/18 17:31 |
| S286 | 1 | (US-20010005024-\$).did. | US-PGPUB | OR | OFF | 2006/07/18 17:31 |
| S287 | 1 | (US-20010005024-\$).did. | US-PGPUB | OR | OFF | 2006/07/18 17:32 |
| S288 | 1 | S287 and active | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/07/18 17:37 |

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| S289 | 27 | stop adj zone same (se selenium sulfur s) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/07/18 17:37 |
| S290 | 34 | stop adj zone same (se selenium sulfur s) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/18 17:37 |
| S291 | 9 | stop adj zone same (se selenium sulfur s) and power near1 semiconductor | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/18 17:39 |
| S292 | 0 | stop adj zone same (se selenium sulfur s) and power near1 semiconductor and @ad<"19980718" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/18 17:40 |
| S293 | 0 | stop adj zone same (se selenium sulfur s) and power near1 semiconductor and @ad<"19990706" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/18 17:42 |
| S294 | 0 | stop adj zone same (se selenium sulfur s band adj gap) and power near1 semiconductor and @ad<"19990706" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/18 17:42 |
| S295 | 0 | stop adj zone same (se selenium sulfur s band adj gap energy adj gap) and power near1 semiconductor and @ad<"19990706" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/18 17:42 |
| S296 | 0 | stop adj zone same (se selenium sulfur s band adj gap energy adj gap band adj energy) and power near1 semiconductor and @ad<"19990706" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/18 17:43 |
| S297 | 68 | stop adj zone.ti. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/18 17:44 |

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| S298 | 4 | stop adj zone.ti. and dopant | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/18 17:48 |
| S299 | 1 | wo-200004598\$-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/18 17:53 |
| S300 | 2 | de-3917769\$-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/19 11:23 |
| S301 | 0 | ep-0760528\$-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/18 18:02 |
| S302 | 0 | ep-0760528\$-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/18 18:02 |
| S303 | 2 | ("5668385"),PN. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/07/19 07:52 |
| S304 | 617 | stop adj zone | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/07/19 08:17 |
| S305 | 61 | stop adj zone.ti. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/07/19 08:17 |
| S306 | 61 | stop adj zone.ti. and stop adj zone | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/07/19 08:18 |

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|------|----|--|---|----|-----|---------------------|
| S307 | 18 | stop adj zone.ti. and stop adj zone and (doping doped dopant) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/07/19 08:19 |
| S308 | 14 | stop adj zone.ti. and stop adj zone and (doping doped dopant) and (se s) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/07/19 08:19 |
| S309 | 4 | stop adj zone.ti. and stop adj zone and (doping doped dopant) and (selenium sulfur) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/07/19 08:22 |
| S310 | 10 | stop adj zone.ti.ab,clm. and stop adj zone and (doping doped dopant) and (selenium sulfur) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/19 08:26 |
| S311 | 4 | power near3 semiconductor.ti.ab,clm. and stop adj zone and (doping doped dopant) and (selenium sulfur) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/19 08:27 |
| S312 | 2 | power near3 (transistor thyristor IGBT).ti.ab,clm. and stop adj zone and (doping doped dopant) and (selenium sulfur) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/19 08:28 |
| S313 | 4 | power near3 (transistor thyristor IGBT).ti.ab,clm. and stop adj zone and (doping doped dopant) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/19 08:39 |
| S314 | 70 | semiconductor and stop adj zone and (doping doped dopant) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/19 08:39 |
| S315 | 3 | semiconductor and stop adj zone and (doping doped dopant) and valence adj band | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/19 08:41 |

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| S316 | 8 | semiconductor and stop adj zone and (doping doped dopant) and selenium | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/19 09:59 |
| S318 | 1768 | ((257/107) or (257/109) or (257/110) or (257/147) or (257/148) or (257/137) or (257/138) or (257/155) or (257/156) or (257/163) or (257/164)).CCLS. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/07/19 11:24 |
| S319 | 3 | S318 and energy adj level near4 (band adj gap energy adj gap) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/07/19 11:26 |
| S320 | 8 | S318 and stop adj zone | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/07/19 11:26 |
| S321 | 1 | (US-20010005024-\$).did. | US-PGPUB | OR | OFF | 2006/10/03 16:35 |
| S322 | 1 | (US-20010005024-\$).did. and active near10 (stop adj zone) | US-PGPUB | OR | ON | 2006/10/03 16:35 |
| S323 | 2 | ("5668385").PN. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/11/10 17:17 |
| S324 | 0 | ("de-39177769\$-\$).did.").PN. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/11/10 17:18 |

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|------|-----|--|---|----|-----|---------------------|
| S325 | 227 | (US-20010005024-\$ or US-20010005036-\$ or US-20020024056-\$ or US-20030006497-\$ or US-20030197247-\$ or US-20030122151-\$ or US-20030094857-\$ or US-20040084724-\$ or US-20040080015-\$ or US-20040137665-\$).did. or (US-5065211-\$ or US-4910573-\$ or US-4581626-\$ or US-5005065-\$ or US-4954869-\$ or US-5359220-\$ or US-5306930-\$ or US-5365477-\$ or US-5371385-\$ or US-5378903-\$ or US-5381025-\$ or US-5381026-\$ or US-5401985-\$ or US-5429953-\$ or US-5412228-\$ or US-5444271-\$ or US-5319221-\$ or US-5444272-\$ or US-5457329-\$ or US-5461242-\$ or US-5464994-\$ or US-5319222-\$ or US-5471075-\$ or US-5477064-\$ or US-5486709-\$ or US-5491351-\$).did. or (US-5202750-\$ or US-5245202-\$ or US-5241194-\$ or US-5504351-\$ or US-5525816-\$ or US-5528058-\$ or US-5539217-\$ or US-5543639-\$ or US-5498884-\$ or US-5291040-\$ or US-5569941-\$ or US-5068704-\$ or US-5083185-\$ or US-5610415-\$ or US-5619047-\$ or US-5659185-\$ or US-5661314-\$ or US-5587594-\$ or US-5637888-\$ or US-5644150-\$ or US-5668385-\$ or US-5679966-\$ or US-5710445-\$ or US-5719411-\$ or US-4243999-\$ or US-5684306-\$ or US-5306929-\$).did. or (US-5719413-\$ or US-5311042-\$ or US-5698867-\$ or US-5705835-\$ or US-4958211-\$ or US-3337782-\$ or US-4089024-\$ or US-5296725-\$ or US-4851889-\$ or US-4032958-\$ or US-3577046-\$ or US-RE32784-\$ or US-4963972-\$ or US-5304821-\$ or US-5017992-\$ or US-5210432-\$ or US-4914496-\$ or US-4717940-\$ or US-5981981-\$ or US-5132767-\$ or US-5315134-\$ or US-5091766-\$ or US-5751023-\$ or US-5428230-\$ or US-5144401-\$ or US-4868636-\$ or US-5111268-\$).did. or (US-5345095-\$ or US-5336907-\$ or US-3470036-\$ or US-4977438-\$ or US-4951109-\$ or US-6756612-\$ or US-6703647-\$ or US-6555848-\$ or US-6472693-\$ or US-6437383-\$ or US-6420774-\$ or US-6407412-\$ or US-5144400-\$ or US-6380569-\$ or US-6274892-\$ or US-6268639-\$ or US-6242766-\$ or US-6104043-\$ or US-RE36770-\$ or US-5962893-\$ or US-5895974-\$ or US-5608238-\$ or US-5614737-\$ or US-5397905-\$ or US-4969028-\$ or US-4825266-\$ or US-4651191-\$).did. or (US-4559551-\$ or US-4520552-\$ or US-4107731-\$ or US-4081818-\$ or US-4040170-\$ or US-3988771-\$ or US-3697827-\$ or US-5757033-\$ or US-5629535-\$ or US-5550392-\$ or US-5483087-\$ or US-6867437-\$ or US-6803627-\$ or US-6620653-\$ or US-5757034-\$ or US-5488236-\$ or US-5412227-\$ or US-5258641-\$ or US-5198687-\$ or US-3739236-\$ or US-RE34158-\$ or US-4219829-\$ or US-5407491-\$ or US-5684323-\$ or US-5262336-\$ or US-5574297-\$ or US-5293054-\$).did. or (US-4053921-\$ or US-5317171-\$ or US-5294816-\$ or US-4062032-\$ or US-6049108-\$ or US-5204541-\$ or US-5124772-\$ or US-6278140-\$ or US-6271545-\$ or US-6218217-\$ or US-6198115-\$ or US-6169299-\$ or US-6111290-\$ or US-6111278-\$ or US-RE36818-\$ or US-6054728-\$ or US-5998811-\$ or US-5981984-\$ or US-5981982-\$ or US-5977569-\$ or US-5936267-\$ or US-4760431-\$ or US-5925900-\$ or US-5923055-\$ or US-6313485-\$ or US-6236069-\$ or US-5894149-\$).did. or (US-5844258-\$ or US-5831291-\$ or US-5793066-\$ or US-6118141-\$ or US-6107649-\$ or US-6020623-\$ or US-5796124-\$ or US-5151766-\$ or US-6043112-\$ or US-6309920-\$ or US-5682044-\$ or US-6441408-\$ or US-6660569-\$ or US-6703294-\$ or US-6696705-\$ or US-6693310-\$ or US-6734462-\$ or US-6683328-\$ or US-6501099-\$ or US-6445012-\$ or US-6423987-\$ or US-6265735-\$ or US-6091087-\$ or US-5914503-\$ or US-5591991-\$).did. or (US-5528058-\$ or DE-3837748-\$ or DE-3932490-\$ or DE-3837747-\$ or US-3953243-\$ or EP-621640-\$ or EP-760528-\$ or DE-3917769-\$ or DE-10214176-\$).did. or (JP-03070176-\$ or JP-04240775-\$ or JP-06151825-\$ or JP-03116874-\$ or JP-02296370-\$ or JP-01270352-\$ or JP-06061479-\$ or JP-04357875-\$ or JP-04317375-\$).did. or (US-5710445-\$ or EP-1017093-\$ or DE-3932490-\$ or EP-144876-\$ or EP-1097480-\$ or DE-19531369-\$ or DE-10048165-\$ or EP-621640-\$ or DE-3917769-\$ or DE-10243758-\$ or DE-19731495-\$ or EP-347778-\$ or DE-10214176-\$ or WO-200203469-\$ or DE-2734726-\$).did. | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2006/11/10 17:36 |
| S326 | 2 | S325 and gerstenmaier.in. | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2006/11/10 18:01 |

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| S327 | 18 | stop adj (region zone layer film) near4 (selenium sulfur ev mev) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2006/11/10 18:08 |
| S328 | 62 | stop adj (region zone layer film) near4 (selenium sulfur ev mev band adj gap energy adj gap) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/11/10 18:18 |
| S329 | 8 | hole adj injection adj stop adj (zone region layer film) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/11/10 18:20 |
| S330 | 187 | field adj stop adj (film layer zone region) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/11/10 18:21 |
| S331 | 26 | field adj stop adj (film layer zone region) and thyristor | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/11/10 18:21 |
| S332 | 57 | field adj stop adj (film layer zone region) and (emitter thyristor) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/11/10 18:21 |
| S333 | 28 | field adj stop adj (film layer zone region) near10 (emitter thyristor) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/11/10 18:22 |
| S334 | 3 | field adj stop adj (film layer zone region) near10 (emitter thyristor) near20 (selenium sulfur) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/11/10 18:26 |
| S335 | 3 | field adj stop adj (film layer zone region) near10 (emitter thyristor scr) near20 (selenium sulfur) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/11/10 18:27 |
| S336 | 3 | field adj stop adj (film layer zone region) near10 (emitter thyristor scr rectifier) near20 (selenium sulfur) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/11/10 18:27 |
| S337 | 3 | field adj stop adj (film layer zone region) near20 (emitter thyristor scr rectifier) near20 (selenium sulfur) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/11/10 18:28 |

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| S338 | 3 | ((hole adj injection) field) adj stop adj (film layer zone region) near20 (emitter thyristor scr rectifier) near20 (selenium sulfur) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/11/10 18:29 |
| S339 | 3 | ((hole adj injection) field) near4 stop adj (film layer zone region) near20 (emitter thyristor scr rectifier) near20 (selenium sulfur) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/11/10 18:29 |
| S340 | 3 | ((hole adj injection) field) with stop adj (film layer zone region) near20 (emitter thyristor scr rectifier) near20 (selenium sulfur) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/11/10 18:30 |
| S341 | 3 | ((hole adj injection) field) near20 stop adj (film layer zone region) near20 (emitter thyristor scr rectifier) near20 (selenium sulfur) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/11/10 19:04 |
| S342 | 9 | fs-igbt | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/11/10 19:05 |
| S343 | 232 | (US-20010005024-\$ or US-20010005036-\$ or US-20020024056-\$ or US-20030006497-\$ or US-20030197247-\$ or US-20030122151-\$ or US-20030094857-\$ or US-20040084724-\$ or US-20040080015-\$ or US-20040137665-\$ or US-20060244060-\$ or US-20020094597-\$ or US-20060006459-\$ or US-20050045945-\$ or US-20050029589-\$).did. or (US-5065211-\$ or US-4910573-\$ or US-4581626-\$ or US-5005065-\$ or US-4954869-\$ or US-5359220-\$ or US-5306930-\$ or US-5365477-\$ or US-5371385-\$ or US-5378903-\$ or US-5381025-\$ or US-5381026-\$ or US-5401985-\$ or US-5429953-\$ or US-5412228-\$ or US-5444271-\$ or US-5319221-\$ or US-5444272-\$ or US-5457329-\$ or US-5461242-\$ or US-5464994-\$ or US-5319222-\$ or US-5471075-\$ or US-5477064-\$ or US-5486709-\$ or US-5491351-\$).did. or (US-5202750-\$ or US-5245202-\$ or US-5241194-\$ or US-5504351-\$ or US-5525816-\$ or US-5528058-\$ or US-5539217-\$ or US-5543639-\$ or US-5498884-\$ or US-5291040-\$ or US-5569941-\$ or US-5068704-\$ or US-5083185-\$ or US-5610415-\$ or US-5619047-\$ or US-5659185-\$ or US-5661314-\$ or US-5587594-\$ or US-5637888-\$ or US-5644150-\$ or US-5668385-\$ or US-5679966-\$ or US-5710445-\$ or US-5719411-\$ or US-4243999-\$ or US-5684306-\$ or US-5306929-\$).did. or (US-5719413-\$ or US-5311042-\$ or US-5698867-\$ or US-5705835-\$ or US-4958211-\$ or US-3337782-\$ or US-4089024-\$ or US-5296725-\$ or US-4851889-\$ or US-4032958-\$ or US-3577046-\$ or US-RE32784-\$ or US-4963972-\$ or US-5304821-\$ or US-5017992-\$ or US-5210432-\$ or US-4914496-\$ or US-4717940-\$ or US-5981981-\$ or US-5132767-\$ or US-5315134-\$ or US-5091766-\$ or US-5751023-\$ or US-5428230-\$ or US-5144401-\$ or US-4868636-\$ or US-5111268-\$).did. or (US-5345095-\$ or US-5336907-\$ or US-3470036-\$ or US-4977438-\$ or US-4951109-\$ or US-6756612-\$ or US-6703647-\$ or US-6555848-\$ or US-6472693-\$ or US-6437383-\$ or US-6420774-\$ or US-6407412-\$ or US-5144400-\$ or US-6380569-\$ or US-6274892-\$ or US-6268639-\$ or US-6242766-\$ or US-6104043-\$ or US-RE36770-\$ or US-5962893-\$ or US-5895974-\$ or US-5608238-\$ or US-5614737-\$ or US-5397905-\$ or US-4969028-\$ or US-4825266-\$ or US-4651191-\$).did. or (US-4559551-\$ or US-4520552-\$ or US-4107731-\$ or US-4081818-\$ or US-4040170-\$ or US-3988771-\$ or US-3697827-\$ or US-5757033-\$ or US-5629535-\$ or US-5550392-\$ or US-5483087-\$ or US-6867437-\$ or US-6803627-\$ or US-6620653-\$ or US-5757034-\$ or US-5488236-\$ or US-5412227-\$ or US-5258641-\$ or US-5198687-\$ or US-3739236-\$ or US-RE34158-\$ or US-4219829-\$ or US-5407491-\$ or US-5684323-\$ or US- | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2006/11/10 19:38 |

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| | | 5262336-\$ or US-5574297-\$ or US-5293054-\$).did. or (US-4053921-\$ or US-5317171-\$ or US-5294816-\$ or US-4062032-\$ or US-6049108-\$ or US-5204541-\$ or US-5124772-\$ or US-6278140-\$ or US-6271545-\$ or US-6218217-\$ or US-6198115-\$ or US-6169299-\$ or US-6111290-\$ or US-6111278-\$ or US-RE36818-\$ or US-6054728-\$ or US-5998811-\$ or US-5981984-\$ or US-5981982-\$ or US-5977569-\$ or US-5936267-\$ or US-4760431-\$ or US-5925900-\$ or US-5923055-\$ or US-6313485-\$ or US-6236069-\$ or US-5894149-\$).did. or (US-5844258-\$ or US-5831291-\$ or US-5793066-\$ or US-6118141-\$ or US-6107649-\$ or US-6020623-\$ or US-5796124-\$ or US-5151766-\$ or US-6043112-\$ or US-5682044-\$ or US-6441408-\$ or US-6660569-\$ or US-6703294-\$ or US-6696705-\$ or US-6693310-\$ or US-6734462-\$ or US-6683328-\$ or US-6501099-\$ or US-6445012-\$ or US-6423987-\$ or US-6265735-\$ or US-6091087-\$ or US-5914503-\$ or US-5591991-\$ or US-7087981-\$).did. or (US-5528058-\$ or DE-3837748-\$ or DE-3932490-\$ or DE-3837747-\$ or US-3953243-\$ or EP-621640-\$ or EP-760528-\$ or DE-3917769-\$ or DE-10214176-\$).did. or (JP-03070176-\$ or JP-04240775-\$ or JP-06151825-\$ or JP-03116874-\$ or JP-02296370-\$ or JP-01270352-\$ or JP-06061479-\$ or JP-04357875-\$ or JP-04317375-\$).did. or (US-5710445-\$ or EP-1017093-\$ or DE-3932490-\$ or EP-144876-\$ or EP-1097480-\$ or DE-19531369-\$ or DE-10048165-\$ or EP-621640-\$ or DE-3917769-\$ or DE-10243758-\$ or DE-19731495-\$ or EP-347778-\$ or DE-10214176-\$ or WO-200203469-\$ or DE-2734726-\$).did. | | | | |
| S344 | 24 | S343 and (band adj gap selenium sulfur carbon barium manganese) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2006/11/10 21:49 |
| S345 | 2 | S343 and GTO adj thyristor near10 (silicon Si) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2006/11/10 21:51 |
| S346 | 0 | S343 and GTO adj thyristor near20 ((silicon Si) near4 substrate) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2006/11/10 21:51 |
| S347 | 17 | S343 and GTO adj thyristor and ((silicon Si) near4 substrate) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2006/11/10 23:06 |
| S348 | 1500 | thyristor near3 scr | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2006/11/10 23:07 |
| S349 | 889 | thyristor near3 scr | USPAT | OR | OFF | 2006/11/10 23:07 |
| S350 | 114 | thyristor near3 scr and silicon.ti,ab,clm. | USPAT | OR | OFF | 2006/11/10 23:08 |
| S351 | 3 | gto adj thyristor near3 scr and silicon.ti,ab,clm. | USPAT | OR | OFF | 2006/11/10 23:08 |
| S352 | 3 | gto adj thyristor.ti. and silicon.ti,ab,clm. | USPAT | OR | OFF | 2006/11/10 23:43 |

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| S353 | 0 | wo-0004598\$-\$.did. | USPAT | OR | OFF | 2006/11/10 23:43 |
| S354 | 1 | wo-200004598\$-\$.did. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/11/10 23:43 |
| S355 | 0 | wo-0004598\$-\$.did. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/11/10 23:44 |
| S356 | 1 | wo-200004598\$-\$.did. | EPO; DERWENT | OR | OFF | 2007/04/21 15:38 |
| S357 | 0 | 257/107 | EPO; DERWENT | OR | OFF | 2006/11/10 23:52 |
| S358 | 0 | 257/109 | EPO; DERWENT | OR | OFF | 2006/11/10 23:52 |
| S359 | 0 | 257/110 | EPO; DERWENT | OR | OFF | 2006/11/10 23:52 |
| S360 | 0 | 257/137 | EPO; DERWENT | OR | OFF | 2006/11/10 23:52 |
| S361 | 0 | 257/138 | EPO; DERWENT | OR | OFF | 2006/11/10 23:52 |
| S362 | 0 | 57/147 | EPO; DERWENT | OR | OFF | 2006/11/10 23:52 |
| S363 | 0 | 57/148 | EPO; DERWENT | OR | OFF | 2006/11/10 23:52 |
| S364 | 1781 | ((257/107) or (257/109) or (257/110) or (257/137) or (257/138) or (257/147) or (257/148) or (257/155) or (257/156) or (257/163) or (257/164)).OQLS. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/11/10 23:53 |
| S365 | 0 | S364 and thyristor and amphoteric and asymmetric\$2 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/11/11 00:07 |
| S366 | 1 | S364 and thyristor and amphoteric | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/11/11 00:07 |

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|------|---|--|---|----|-----|---------------------|
| S367 | 1 | band adj gap.clm. and energy adj level.clm. and (semiconductor silicon).ti,ab,clm. and (mev ev). clm. and (field adj stop FS-IGBT stop adj zone).clm. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/11/11 00:07 |
| S368 | 1 | band adj gap.clm. and energy adj level.clm. and (semiconductor silicon).ti,ab,clm. and (mev ev). clm. and (field adj stop FS-IGBT stop adj zone).clm. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/11/11 00:07 |
| S369 | 0 | S364 and thyristor and amphoteric and asymmetric\$2 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/11/11 00:07 |
| S370 | 1 | S364 and thyristor and amphoteric | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/11/11 00:07 |
| S371 | 2 | "5610415".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2007/04/21 13:12 |
| S372 | 0 | ep-0760528\$-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2007/04/21 13:12 |
| S373 | 0 | ep-0760528\$-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/21 13:12 |

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|------|-----|--|---|----|-----|---------------------|
| S374 | 233 | (US-20060244060-\$ or US-20020094597-\$ or US-20060006459-\$ or US-20050045945-\$ or US-20050029589-\$ or US-20010005024-\$ or US-20010005036-\$ or US-20020024056-\$ or US-20030197247-\$ or US-20030122151-\$ or US-20030094857-\$ or US-20030006497-\$ or US-20040137665-\$ or US-20040080015-\$ or US-20040084724-\$).did. or (US-4963972-\$ or US-5365477-\$ or US-5017992-\$ or US-4717940-\$ or US-4032958-\$ or US-5412228-\$ or US-5336907-\$ or US-5684306-\$ or US-5710445-\$ or US-5587594-\$ or US-5091766-\$ or US-5486709-\$ or US-5359220-\$ or US-5005065-\$ or US-5591991-\$ or US-4760431-\$ or US-RE34158-\$ or US-4958211-\$ or US-5684323-\$ or US-RE32784-\$ or US-5210432-\$ or US-5719411-\$ or US-5241194-\$ or US-5705835-\$ or US-5698867-\$ or US-5245202-\$).did. or (US-5679966-\$ or US-5668385-\$ or US-5644150-\$ or US-5610415-\$ or US-5569941-\$ or US-5304821-\$ or US-4062032-\$ or US-5543639-\$ or US-5539217-\$ or US-5528058-\$ or US-5525816-\$ or US-5504351-\$ or US-5498884-\$ or US-5477064-\$ or US-5444272-\$ or US-5317171-\$ or US-5444271-\$ or US-5471075-\$ or US-5464994-\$ or US-5461242-\$ or US-5429953-\$ or US-5083185-\$ or US-5661314-\$ or US-5659185-\$ or US-4914496-\$ or US-5491351-\$ or US-5457329-\$).did. or (US-4053921-\$ or US-3577046-\$ or US-3739236-\$ or US-5065211-\$ or US-5306930-\$ or US-5296725-\$ or US-5381026-\$ or US-5981981-\$ or US-4868636-\$ or US-4581626-\$ or US-4089024-\$ or US-5202750-\$ or US-5637888-\$ or US-5428230-\$ or US-5319221-\$ or US-4851889-\$ or US-3470036-\$ or US-5068704-\$ or US-5291040-\$ or US-5294816-\$ or US-5293054-\$ or US-4954869-\$ or US-5719413-\$ or US-5144400-\$ or US-5132767-\$ or US-5124772-\$ or US-5144401-\$).did. or (US-5111268-\$ or US-5619047-\$ or US-4977438-\$ or US-4951109-\$ or US-6756612-\$ or US-6703647-\$ or US-5381025-\$ or US-6555848-\$ or US-6472693-\$ or US-6437383-\$ or US-6420774-\$ or US-6407412-\$ or US-6380569-\$ or US-6274892-\$ or US-6268639-\$ or US-6242766-\$ or US-6104043-\$ or US-RE36770-\$ or US-5962893-\$ or US-5378903-\$ or US-5895974-\$ or US-5608238-\$ or US-5614737-\$ or US-5397905-\$ or US-4969028-\$ or US-4825266-\$ or US-4651191-\$).did. or (US-4559551-\$ or US-4520552-\$ or US-4107731-\$ or US-4081818-\$ or US-4040170-\$ or US-3988771-\$ or US-3697827-\$ or US-5757033-\$ or US-5629535-\$ or US-5550392-\$ or US-5483087-\$ or US-6867437-\$ or US-6803627-\$ or US-6620653-\$ or US-5757034-\$ or US-5488236-\$ or US-5412227-\$ or US-5258641-\$ or US-5198687-\$ or US-7087981-\$ or US-5407491-\$ or US-5371385-\$ or US-5262336-\$ or US-4910573-\$ or US-5311042-\$ or US-4219829-\$ or US-5319222-\$).did. or (US-5574297-\$ or US-4243999-\$ or US-6049108-\$ or US-5306929-\$ or US-5204541-\$ or US-6313485-\$ or US-6236069-\$ or US-6218217-\$ or US-6169299-\$ or US-6118141-\$ or US-6111290-\$ or US-6111278-\$ or US-6107649-\$ or US-6198115-\$ or US-RE36818-\$ or US-6054728-\$ or US-6020623-\$ or US-5998811-\$ or US-5981982-\$ or US-5977569-\$ or US-5925900-\$ or US-5923055-\$ or US-5894149-\$ or US-6278140-\$ or US-6271545-\$ or US-5844258-\$ or US-5831291-\$).did. or (US-5796124-\$ or US-5981984-\$ or US-5936267-\$ or US-5793066-\$ or US-3337782-\$ or US-5345095-\$ or US-5151766-\$ or US-6309920-\$ or US-6043112-\$ or US-5682044-\$ or US-6441408-\$ or US-5315134-\$ or US-5401985-\$ or US-6660569-\$ or US-6703294-\$ or US-6696705-\$ or US-6693310-\$ or US-6734462-\$ or US-6683328-\$ or US-6501099-\$ or US-6445012-\$ or US-6423987-\$ or US-6265735-\$ or US-6091087-\$ or US-5914503-\$ or US-5751023-\$).did. or (US-5528058-\$ or DE-3837748-\$ or DE-3837747-\$ or US-3953243-\$ or DE-3932490-\$ or EP-760528-\$ or EP-621640-\$ or DE-3917769-\$ or DE-10214176-\$).did. or (JP-06151825-\$ or JP-04317375-\$ or JP-01270352-\$ or JP-02296370-\$ or JP-03116874-\$ or JP-03070176-\$ or JP-04240775-\$ or JP-06061479-\$ or JP-04357875-\$).did. or (US-5710445-\$ or EP-1017093-\$ or EP-144876-\$ or DE-3932490-\$ or EP-1097480-\$ or EP-621640-\$ or DE-10048165-\$ or DE-19531369-\$ or DE-3917769-\$ or DE-10243758-\$ or DE-10214176-\$ or WO-200203469-\$ or DE-19731495-\$ or DE-2734726-\$ or EP-347778-\$).did. | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2007/04/21 13:14 |
| S375 | 22 | S374 | EPO; DERWENT | OR | OFF | 2007/04/21 13:48 |
| S376 | 0 | de-19832310\$-\$.did. | EPO; DERWENT | OR | OFF | 2007/04/21 13:49 |

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| S377 | 0 | de-19832310\$-\$.did. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2007/04/21 14:32 |
| S378 | 0 | de-9810332310\$-\$.did. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2007/04/21 14:32 |
| S379 | 0 | de-199810332310\$-\$.did. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2007/04/21 15:35 |
| S380 | 1811 | ((257/107) or (257/109) or (257/110) or (257/137) or (257/138) or (257/147) or (257/148) or (257/155) or (257/156) or (257/163) or (257/164)).CCLS. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2007/04/21 15:37 |
| S381 | 0 | S380 and (field adj stop stop adj zone) and emitter and valence adj band and conductance adj band | EPO; DERWENT | OR | ON | 2007/04/21 15:40 |
| S382 | 0 | S380 and (field adj stop stop adj zone) | EPO; DERWENT | OR | ON | 2007/04/21 15:39 |
| S383 | 1 | S380 and (field adj stop stop adj zone) and emitter and valence adj band and conductance adj band | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/21 15:40 |
| S384 | 1 | (siemens.as. (josef\$1georg near1 bauer).in. (brunner near1 heinrich).in. (schulze near1 hans \$1joachim).in.) and (field adj stop stop adj zone) and emitter and valence adj band and conductance adj band | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/21 15:42 |
| S385 | 17 | supercritical adj ammonia.ti. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/04/21 19:48 |

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| S386 | 1 | "5610415".pn. | USPAT | OR | ON | 2007/11/13 15:21 |
| S387 | 0 | wo-200468499\$-\$.did. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/11/13 15:21 |
| S388 | 0 | wo-0468499\$-\$.did. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/11/13 15:21 |
| S389 | 0 | wo-04068499\$-\$.did. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/11/13 15:21 |
| S390 | 2 | wo-2004068499\$-\$.did. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/11/13 15:23 |
| S391 | 0 | ("544924.ap.").PN. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2007/11/13 15:24 |
| S392 | 4 | "544924".ap. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2007/11/13 15:24 |

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|------|-----|--|---|----|-----|---------------------|
| S393 | 233 | (US-20060244060-\$ or US-20020094597-\$ or US-20060006459-\$ or US-20050045945-\$ or US-20050029589-\$ or US-20010005024-\$ or US-20010005036-\$ or US-20020024056-\$ or US-20030197247-\$ or US-20030006497-\$ or US-20030122151-\$ or US-20030094857-\$ or US-20040137665-\$ or US-20040080015-\$ or US-20040084724-\$).did. or (US-4958211-\$ or US-5378903-\$ or US-5306930-\$ or US-5294816-\$ or US-3470036-\$ or US-RE34158-\$ or US-5132767-\$ or US-4581626-\$ or US-5306929-\$ or US-5381026-\$ or US-5210432-\$ or US-4243999-\$ or US-5719413-\$ or US-5719411-\$ or US-5698867-\$ or US-5311042-\$ or US-5679966-\$ or US-5668385-\$ or US-5661314-\$ or US-5659185-\$ or US-5241194-\$ or US-5644150-\$ or US-5637888-\$ or US-5619047-\$ or US-5610415-\$ or US-5587594-\$).did. or (US-5543639-\$ or US-5539217-\$ or US-5528058-\$ or US-5525816-\$ or US-5486709-\$ or US-4219829-\$ or US-5705835-\$ or US-5684306-\$ or US-5477064-\$ or US-5464994-\$ or US-5461242-\$ or US-5457329-\$ or US-5444272-\$ or US-5444271-\$ or US-5412228-\$ or US-5401985-\$ or US-5569941-\$ or US-5365477-\$ or US-5471075-\$ or US-5345095-\$ or US-5429953-\$ or US-5319221-\$ or US-4963972-\$ or US-3337782-\$ or US-5491351-\$ or US-4717940-\$ or US-4089024-\$).did. or (US-5083185-\$ or US-5319222-\$ or US-5336907-\$ or US-5981981-\$ or US-5304821-\$ or US-5684323-\$ or US-5504351-\$ or US-5144401-\$ or US-3739236-\$ or US-5371385-\$ or US-5065211-\$ or US-5091766-\$ or US-RE32784-\$ or US-5017992-\$ or US-5005065-\$ or US-5407491-\$ or US-5111268-\$ or US-5751023-\$ or US-4977438-\$ or US-4951109-\$ or US-4851889-\$ or US-5245202-\$ or US-5068704-\$ or US-4032958-\$ or US-6756612-\$ or US-6703647-\$ or US-6555848-\$).did. or (US-6472693-\$ or US-6437383-\$ or US-6420774-\$ or US-6407412-\$ or US-6380569-\$ or US-6274892-\$ or US-6268639-\$ or US-6242766-\$ or US-6104043-\$ or US-RE36770-\$ or US-5962893-\$ or US-5895974-\$ or US-5608238-\$ or US-5614737-\$ or US-5397905-\$ or US-4969028-\$ or US-4825266-\$ or US-4651191-\$ or US-4559551-\$ or US-4520552-\$ or US-4107731-\$ or US-4081818-\$ or US-4040170-\$ or US-3988771-\$ or US-3697827-\$ or US-5757033-\$ or US-5629535-\$).did. or (US-5550392-\$ or US-5483087-\$ or US-6867437-\$ or US-6803627-\$ or US-6620653-\$ or US-5757034-\$ or US-5488236-\$ or US-5412227-\$ or US-5258641-\$ or US-5198687-\$ or US-7087981-\$ or US-4954869-\$ or US-5262336-\$ or US-3577046-\$ or US-4868636-\$ or US-5124772-\$ or US-4053921-\$ or US-5359220-\$ or US-4760431-\$ or US-6049108-\$ or US-5574297-\$ or US-4914496-\$ or US-5204541-\$ or US-5144400-\$ or US-6313485-\$ or US-6278140-\$ or US-6271545-\$).did. or (US-6236069-\$ or US-6218217-\$ or US-6198115-\$ or US-6118141-\$ or US-6111290-\$ or US-6111278-\$ or US-6107649-\$ or US-RE36818-\$ or US-6020623-\$ or US-5998811-\$ or US-5981982-\$ or US-6169299-\$ or US-5936267-\$ or US-5894149-\$ or US-5844258-\$ or US-5831291-\$ or US-5796124-\$ or US-5793066-\$ or US-5925900-\$ or US-6054728-\$ or US-5981984-\$ or US-5977569-\$ or US-5923055-\$ or US-5381025-\$ or US-5317171-\$ or US-5293054-\$ or US-4062032-\$).did. or (US-5498884-\$ or US-5151766-\$ or US-6043112-\$ or US-6309920-\$ or US-5710445-\$ or US-4910573-\$ or US-5291040-\$ or US-5315134-\$ or US-5296725-\$ or US-5202750-\$ or US-5682044-\$ or US-6441408-\$ or US-6660569-\$ or US-6703294-\$ or US-6696705-\$ or US-6091087-\$ or US-5914503-\$ or US-5591991-\$ or US-5428230-\$ or US-6693310-\$ or US-6734462-\$ or US-6683328-\$ or US-6501099-\$ or US-6445012-\$ or US-6423987-\$ or US-6265735-\$).did. or (US-5528058-\$ or DE-3932490-\$ or DE-3837748-\$ or DE-3837747-\$ or US-3953243-\$ or EP-760528-\$ or EP-621640-\$ or DE-3917769-\$ or DE-10214176-\$).did. or (JP-04357875-\$ or JP-06151825-\$ or JP-04317375-\$ or JP-04240775-\$ or JP-06061479-\$ or JP-03070176-\$ or JP-02296370-\$ or JP-03116874-\$ or JP-01270352-\$).did. or (US-5710445-\$ or EP-1017093-\$ or DE-3932490-\$ or EP-144876-\$ or EP-1097480-\$ or DE-19531369-\$ or DE-10048165-\$ or EP-621640-\$ or DE-3917769-\$ or DE-10243758-\$ or DE-10214176-\$ or WO-200203469-\$ or EP-347778-\$ or DE-2734726-\$ or DE-19731495-\$).did. | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2007/11/13 16:49 |
| S394 | 16 | S393 and thyristor and (doping near2 profile) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2007/11/13 16:51 |

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|------|------|---|---|----|-----|---------------------|
| S395 | 6 | S393 and thyristor and (doping near2 profile) and (stop adj zone blocking adj (zone layer)) | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2007/11/13 17:49 |
| S396 | 2024 | ((257/107) or (257/109) or (257/110) or (257/137) or (257/138) or (257/147) or (257/148) or (257/155) or (257/156) or (257/163) or (257/164)).OCLS. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2007/11/13 17:50 |
| S397 | 1 | S396 and emitter and (blocking stop) and profile and (selenium sulfur) and ((on-state "on" adj state) ("off" adj state off-state)) and valence and conduction and energy near3 (level band) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2007/11/13 17:53 |
| S398 | 1 | S396 and emitter and (blocking stop) and profile and (selenium sulfur) and ((on-state "on" adj state) ("off" adj state off-state)) and valence and conduction and energy near3 (level band) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2007/11/13 17:53 |
| S399 | 3 | ((schulze near2 hans-joachim).in. (brunner near2 heinrich).in. (bauer near3 josef-georg).in. (siemens).as.) and emitter and (blocking stop) and profile and (selenium sulfur) and ((on-state "on" adj state) ("off" adj state off-state)) and valence and conduction and energy near3 (level band) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/11/13 17:58 |
| S400 | 1 | ("6441408").PN. | USPAT; USOCR | OR | OFF | 2007/11/13 17:57 |
| S401 | 0 | ((schulze near2 hans-joachim).in. (brunner near2 heinrich).in. (bauer near3 josef-georg).in. (siemens).as.) and emitter.clm. and (blocking stop).clm. and profile.clm. and (selenium sulfur).clm. and ((on-state "on" adj state) ("off" adj state off-state)) and valence.clm. and conduction.clm. and energy near3 (level band).clm. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2007/11/13 17:59 |
| S402 | 2 | ("6441408").PN. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2008/08/18 09:46 |

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| S403 | 2 | ("5610415").PN. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2008/08/18 10:19 |
| S404 | 2065 | ((257/107) or (257/109) or (257/110) or (257/137) or (257/138) or (257/147) or (257/148) or (257/155) or (257/156) or (257/163) or (257/164)).OCLS. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2008/08/18 10:35 |
| S405 | 1 | S404 and (S sulfur Se selenium) near4 (dopant atom) and (emitter adj region) and (stop adj zone) and band adj gap and energy adj level | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/08/18 10:38 |
| S406 | 1 | ((bauer near1 joseph-georg)"in." (brunner near1 heinrich)"in." (schulze near1 hans-joachim)"in." (siemens).as. (infineon).as.) and (S sulfur Se selenium) near4 (dopant atom) and (emitter adj region) and (stop adj zone) and band adj gap and energy adj level | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/08/18 10:40 |
| S407 | 2 | "6441408".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/02/18 10:54 |
| S408 | 2 | "6891204".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/02/18 10:57 |
| S409 | 1 | (US-20010005024-\$).did. | US-PGPUB | OR | ON | 2009/02/18 10:57 |
| S410 | 1 | wo-0004598\$-\$\$.did. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/02/18 14:00 |

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|------|-------|--|---|----|-----|---------------------|
| S411 | 0 | "de-19832310.7"\$-\$\$.did. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/02/18 15:01 |
| S412 | 0 | "de-19832310"\$-\$\$.did. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/02/18 15:01 |
| S413 | 31712 | laser.ti. and "372"/\$7.ccls. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/02/18 15:45 |
| S414 | 702 | laser.ti. and "372"/\$7.ccls. and @ad>"20070101" | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/02/18 15:46 |
| S415 | 55 | laser.ti. and "372"/\$7.ccls. and @ad>"20070101" | USPAT | OR | ON | 2009/02/18 15:46 |
| S416 | 1 | (US-20010005024-\$).did. | US-PGPUB | OR | OFF | 2009/04/16 08:27 |
| S417 | 232 | (US-20060244060-\$ or US-20050045945-\$ or US-20050029589-\$ or US-20060006459-\$ or US-20040084724-\$ or US-20040080015-\$ or US-20040137665-\$ or US-20030197247-\$ or US-20030006497-\$ or US-20030122151-\$ or US-20020024056-\$ or US-20030094857-\$ or US-20020094597-\$ or US-20010005036-\$ or US-20010005024-\$).did. or (US-6756612-\$ or US-6734462-\$ or US-7087981-\$ or US-6703647-\$ or US-6867437-\$ or US-6803627-\$ or US-6696705-\$ or US-6703294-\$ or US-6683328-\$ or US-6660569-\$ or US-6693310-\$ or US-6445012-\$ or US-6441408-\$ or US-6620653-\$ or US-6437383-\$ or US-6555848-\$ or US-6501099-\$ or US-6420774-\$ or US-6472693-\$ or US-6380569-\$ or US-6313485-\$ or US-6309920-\$ or US-6423987-\$ or US-6274892-\$ or US-6407412-\$ or US-6271545-\$).did. or (US-6268639-\$ or US-6278140-\$ or US-6242766-\$ or US-6218217-\$ or US-6198115-\$ or US-6265735-\$ or US-6118141-\$ or US-5684306-\$ or US-6111290-\$ or US-6236069-\$ or US-6111278-\$ or US-6107649-\$ or US-6169299-\$ or US-RE36818-\$ or US-6091087-\$ or US-6054728-\$ or US-6043112-\$ or US-6020623-\$ or US-5981984-\$ or US-6104043-\$ or US-5981982-\$ or US-5981981-\$ or US-RE36770-\$ or US-5977569-\$ or US-5936267-\$ or US-6049108-\$ or US-5925900-\$).did. or (US-5923055-\$ or US-5914503-\$ or US-5894149-\$ or US-5998811-\$ or US-5831291-\$ or US-5757034-\$ or US-5751023-\$ or US-5719413-\$ or US-5962893-\$ or US-5719411-\$ or US-5710445-\$ or US-5705835-\$ or US-5684323-\$ or US-5895974-\$ or US-5844258-\$ or US-5679966-\$ or US-5796124-\$ or US-5793066-\$ or US-5668385-\$ or US-5661314-\$ or US-5757033-\$ or US-5644150-\$ or US-5698867-\$ or US-5637888-\$ or US-5629535-\$ or US-5614737-\$ or US-5682044-\$).did. or (US-5610415-\$ or US-5587594-\$ or US-5574297-\$ or US-5659185-\$ or US-5569941-\$ or US-5550392-\$ or US-5543639-\$ or US-5528058-\$ | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2009/06/16 15:20 |

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|------|----|---|---|----|-----|---------------------|
| | | or US-5619047-\$ or US-5608238-\$ or US-5591991-\$ or US-5498884-\$ or US-5491351-\$ or US-5486709-\$ or US-5483087-\$ or US-5477064-\$ or US-5539217-\$ or US-5525816-\$ or US-5457329-\$ or US-5444272-\$ or US-5504351-\$ or US-5428230-\$ or US-5488236-\$ or US-5471075-\$ or US-5412227-\$ or US-5407491-\$ or US-5464994-\$).did. or (US-5461242-\$ or US-5444271-\$ or US-5397905-\$ or US-5381025-\$ or US-5378903-\$ or US-5412228-\$ or US-5429953-\$ or US-5345095-\$ or US-5381026-\$ or US-5401985-\$ or US-5319221-\$ or US-5317171-\$ or US-5315134-\$ or US-5371385-\$ or US-5306930-\$ or US-5306929-\$ or US-5365477-\$ or US-5359220-\$ or US-5319222-\$ or US-5336907-\$ or US-5294816-\$ or US-5291040-\$ or US-5311042-\$ or US-5262336-\$ or US-5245202-\$ or US-5241194-\$ or US-5304821-\$).did. or (US-5296725-\$ or US-5210432-\$ or US-5204541-\$ or US-5151766-\$ or US-5293054-\$ or US-5258641-\$ or US-5144400-\$ or US-5132767-\$ or US-5091766-\$ or US-5202750-\$ or US-5198687-\$ or US-5068704-\$ or US-5065211-\$ or US-5005065-\$ or US-4969028-\$ or US-RE34158-\$ or US-5144401-\$ or US-5111268-\$ or US-5124772-\$ or US-4954869-\$ or US-4951109-\$ or US-4914496-\$ or US-4910573-\$ or US-5083185-\$ or US-5017992-\$ or US-4868636-\$ or US-RE32784-\$).did. or (US-4977438-\$ or US-4963972-\$ or US-4958211-\$ or US-4651191-\$ or US-4559551-\$ or US-4243999-\$ or US-4219829-\$ or US-4107731-\$ or US-4089024-\$ or US-4851889-\$ or US-4825266-\$ or US-4760431-\$ or US-4717940-\$ or US-4062032-\$ or US-4053921-\$ or US-4032958-\$ or US-3988771-\$ or US-3739236-\$ or US-4581626-\$ or US-4520552-\$ or US-4081818-\$ or US-4040170-\$ or US-3470036-\$ or US-3697827-\$ or US-3577046-\$ or US-3337782-\$).did. or (DE-10214176-\$ or EP-621640-\$ or DE-3837748-\$ or DE-3837747-\$ or EP-760528-\$ or DE-3932490-\$ or DE-3917769-\$ or US-5528058-\$ or US-3953243-\$).did. or (JP-06151825-\$ or JP-06061479-\$ or JP-04357875-\$ or JP-04240775-\$ or JP-03116874-\$ or JP-03070176-\$ or JP-01270352-\$ or JP-04317375-\$ or JP-02296370-\$).did. or (DE-10214176-\$ or DE-10048165-\$ or DE-19731495-\$ or EP-621640-\$ or DE-10243758-\$ or WO-200203469-\$ or EP-1017093-\$ or DE-3932490-\$ or DE-3917769-\$ or EP-144876-\$ or EP-1097480-\$ or DE-19531369-\$ or EP-347778-\$ or DE-2734726-\$ or US-5710445-\$).did. | | | | |
| S418 | 2 | "5610415".PN. | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2009/06/16 17:18 |
| S419 | 1 | donor adj properties near4 temperature | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2009/06/16 18:43 |
| S420 | 2 | (acceptor donor) adj properties near4 temperature | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2009/06/16 18:43 |
| S421 | 1 | (US-20010005024-\$).did. | US-PGPUB | OR | OFF | 2009/06/16 18:48 |
| S422 | 44 | dopant near10 (sulfur selenium) near10 temperature | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/16 18:50 |

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|------|-----|---|---|----|-----|---------------------|
| S423 | 1 | dopant near10 (sulfur selenium) near10 "300 C" | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/16 18:57 |
| S424 | 1 | "6510415".pn. | USPAT | OR | OFF | 2009/06/17 08:49 |
| S425 | 1 | "5610415".pn. | USPAT | OR | OFF | 2009/06/17 08:49 |
| S426 | 6 | sulfur near10 p-type adj conductivity | USPAT | OR | OFF | 2009/06/17 10:12 |
| S427 | 2 | sulfur near10 p-type adj conductivity and silicon | USPAT | OR | OFF | 2009/06/17 10:13 |
| S428 | 967 | (sulfur selenium) near4 dopant | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/17 12:50 |
| S429 | 6 | (sulfur selenium) near4 dopant and "300 C" | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/17 12:50 |
| S430 | 139 | (sulfur selenium) near4 dopant and emitter | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/17 17:29 |
| S431 | 9 | mond.t.xp. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/18 13:36 |
| S432 | 7 | "748734".ap. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/18 13:37 |

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|------|-----|--|---|----|-----|---------------------|
| S433 | 232 | (US-20060244060-\$ or US-20050045945-\$ or US-20050029589-\$ or US-20060006459-\$ or US-20040084724-\$ or US-20040080015-\$ or US-20040137665-\$ or US-20030197247-\$ or US-20030006497-\$ or US-20030122151-\$ or US-20020024056-\$ or US-20030094857-\$ or US-20020094597-\$ or US-20010005036-\$ or US-20010005024-\$).did. or (US-6756612-\$ or US-6734462-\$ or US-7087981-\$ or US-6703647-\$ or US-6867437-\$ or US-6803627-\$ or US-6696705-\$ or US-6703294-\$ or US-6683328-\$ or US-6660569-\$ or US-6693310-\$ or US-6445012-\$ or US-6441408-\$ or US-6620653-\$ or US-6437383-\$ or US-6555848-\$ or US-6501099-\$ or US-6420774-\$ or US-6472693-\$ or US-6380569-\$ or US-6313485-\$ or US-6309920-\$ or US-6423987-\$ or US-6274892-\$ or US-6407412-\$ or US-6271545-\$).did. or (US-6268639-\$ or US-6278140-\$ or US-6242766-\$ or US-6218217-\$ or US-6198115-\$ or US-6265735-\$ or US-6118141-\$ or US-5684306-\$ or US-6111290-\$ or US-6236069-\$ or US-6111278-\$ or US-6107649-\$ or US-6169299-\$ or US-RE36818-\$ or US-6091087-\$ or US-6054728-\$ or US-6043112-\$ or US-6020623-\$ or US-5981984-\$ or US-6104043-\$ or US-5981982-\$ or US-5981981-\$ or US-RE36770-\$ or US-5977569-\$ or US-5936267-\$ or US-6049108-\$ or US-5925900-\$).did. or (US-5923055-\$ or US-5914503-\$ or US-5894149-\$ or US-5998811-\$ or US-5831291-\$ or US-5757034-\$ or US-5751023-\$ or US-5719413-\$ or US-5962893-\$ or US-5719411-\$ or US-5710445-\$ or US-5705835-\$ or US-5684323-\$ or US-5895974-\$ or US-5844258-\$ or US-5679966-\$ or US-5796124-\$ or US-5793066-\$ or US-5668385-\$ or US-5661314-\$ or US-5757033-\$ or US-5644150-\$ or US-5698867-\$ or US-5637888-\$ or US-5629535-\$ or US-5614737-\$ or US-5682044-\$).did. or (US-5610415-\$ or US-5587594-\$ or US-5574297-\$ or US-5659185-\$ or US-5569941-\$ or US-5550392-\$ or US-5543639-\$ or US-5528058-\$ or US-5619047-\$ or US-5608238-\$ or US-5591991-\$ or US-5498884-\$ or US-5491351-\$ or US-5486709-\$ or US-5483087-\$ or US-5477064-\$ or US-5539217-\$ or US-5525816-\$ or US-5457329-\$ or US-5444272-\$ or US-5504351-\$ or US-5428230-\$ or US-5488236-\$ or US-5471075-\$ or US-5412227-\$ or US-5407491-\$ or US-5464994-\$).did. or (US-5461242-\$ or US-5444271-\$ or US-5397905-\$ or US-5381025-\$ or US-5378903-\$ or US-5412228-\$ or US-5429953-\$ or US-5345095-\$ or US-5381026-\$ or US-5401985-\$ or US-5319221-\$ or US-5317171-\$ or US-5315134-\$ or US-5371385-\$ or US-5306930-\$ or US-5306929-\$ or US-5365477-\$ or US-5359220-\$ or US-5319222-\$ or US-5336907-\$ or US-5294816-\$ or US-5291040-\$ or US-5311042-\$ or US-5262336-\$ or US-5245202-\$ or US-5241194-\$ or US-5304821-\$).did. or (US-5296725-\$ or US-5210432-\$ or US-5204541-\$ or US-5151766-\$ or US-5293054-\$ or US-5258641-\$ or US-5144400-\$ or US-5132767-\$ or US-5091766-\$ or US-5202750-\$ or US-5198687-\$ or US-5068704-\$ or US-5065211-\$ or US-5005065-\$ or US-4969028-\$ or US-RE34158-\$ or US-5144401-\$ or US-5111268-\$ or US-5124772-\$ or US-4954869-\$ or US-4951109-\$ or US-4914496-\$ or US-4910573-\$ or US-5083185-\$ or US-5017992-\$ or US-4868636-\$ or US-RE32784-\$).did. or (US-4977438-\$ or US-4963972-\$ or US-4958211-\$ or US-4651191-\$ or US-4559551-\$ or US-4243999-\$ or US-4219829-\$ or US-4107731-\$ or US-4089024-\$ or US-4851889-\$ or US-4825266-\$ or US-4760431-\$ or US-4717940-\$ or US-4062032-\$ or US-4053921-\$ or US-4032958-\$ or US-3988771-\$ or US-3739236-\$ or US-4581626-\$ or US-4520552-\$ or US-4081818-\$ or US-4040170-\$ or US-3470036-\$ or US-3697827-\$ or US-3577046-\$ or US-3337782-\$).did. or (DE-10214176-\$ or EP-621640-\$ or DE-3837748-\$ or DE-3837747-\$ or EP-760528-\$ or DE-3932490-\$ or DE-3917769-\$ or US-5528058-\$ or US-3953243-\$).did. or (JP-06151825-\$ or JP-06061479-\$ or JP-04357875-\$ or JP-04240775-\$ or JP-03116874-\$ or JP-03070176-\$ or JP-01270352-\$ or JP-04317375-\$ or JP-02296370-\$).did. or (DE-10214176-\$ or DE-10048165-\$ or DE-19731495-\$ or EP-621640-\$ or DE-10243758-\$ or WO-200203469-\$ or EP-1017093-\$ or DE-3932490-\$ or DE-3917769-\$ or EP-144876-\$ or EP-1097480-\$ or DE-19531369-\$ or EP-347778-\$ or DE-2734726-\$ or US-5710445-\$).did. | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2009/06/18 13:47 |
| S434 | 6 | S433 and porst.in. | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2009/06/18 13:49 |

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| S435 | 1 | (US-20010005024-\$).did. | US-PGPUB | OR | OFF | 2009/06/18 14:33 |
| S436 | 0 | S435 and latch\$1up | USPAT | OR | OFF | 2009/06/18 14:33 |
| S437 | 0 | S435 and latch\$1up | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/18 14:33 |
| S438 | 1 | (US-20010005024-\$).did. | US-PGPUB | OR | OFF | 2009/06/18 14:34 |
| S439 | 16 | (reduce reduction) near4 (static adj loss) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/18 14:35 |
| S440 | 4 | (reduce reduction) near4 (static adj loss) and power and (thyristor semiconductor) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/18 14:36 |
| S441 | 1 | "4517582".PN. | USPAT; USOCR | OR | OFF | 2009/06/18 14:39 |
| S442 | 8 | ("4517582").URPN. | USPAT | OR | OFF | 2009/06/18 14:40 |
| S443 | 1 | ("4517582").URPN. and (sulfur selenium "200" "meV") | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/18 14:44 |
| S444 | 4 | latch-up and deep and baliga.in. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/18 14:50 |
| S445 | 0 | latch-up and deep and baliga.in. and sulfur | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/18 14:52 |

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| S446 | 0 | latch-up and deep and baliga.in. and dopant near4 (sulfur selenium S Se) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/18 14:52 |
| S447 | 0 | latch-up and deep and baliga.in. and dopant near12 (sulfur selenium S Se) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/18 14:52 |
| S448 | 0 | latch-up and deep and baliga.in. and mev | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/18 14:52 |
| S449 | 6 | stop adj zone and thyristor and latch\$1up | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/18 14:55 |
| S450 | 2418 | (257/107,109,110,137,138,139,147,148,155,156,163,164).CQLS. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2009/06/18 14:58 |
| S451 | 0 | ("31and(stopadjzonelatch\$1updeepadjlevel)").PN. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2009/06/18 14:58 |
| S452 | 0 | S450 and (stop adj zone latch\$up) and (deep\$1level) and dopant near10 (S Se sulfur selenium) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/18 15:00 |

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| S453 | 2 | S450 and (stop adj zone latch\$up) and dopant near10 (S Se sulfur selenium) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/18 15:00 |
| S454 | 138 | (stop adj zone latch\$up) and dopant near10 (S Se sulfur selenium) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/18 15:01 |
| S455 | 12 | (stop adj zone latch\$up) and dopant near10 (S Se sulfur selenium) and thyristor | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/18 15:01 |
| S456 | 4231 | (257/107,110,133,138,139,144,147,152,155,156,163,164,165,341,342).CCLS. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2009/06/18 15:17 |
| S457 | 0 | S456 and (stop adj zone latch\$up) and (deep\$1level) and dopant near10 (S Se sulfur selenium) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/18 15:17 |
| S458 | 6 | S456 and (stop adj zone latch\$up) and dopant near10 (S Se sulfur selenium) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/18 15:17 |
| S459 | 176 | (257/156).CCLS. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2009/06/18 15:20 |

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| S460 | 69 | S459 and (dopant doping sulfur selenium) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2009/06/18 15:20 |
| S461 | 1 | (US-20010005024-\$).did. | US-PGPUB | OR | OFF | 2009/06/18 15:55 |
| S462 | 0 | (US-20010005024-\$).did. and gain | US-PGPUB | OR | OFF | 2009/06/18 15:55 |
| S463 | 1 | (US-20010005024-\$).did. and (amplify amplification) | US-PGPUB | OR | ON | 2009/06/18 15:55 |
| S464 | 0 | S456 and ((bauer near1 josef-georg).in. (brunner near1 heinrich).in. (schulze near1 hans-joachim).in. infineon.as. siemens.as.) and (sulfur selenium se s) near10 (doping dopant impurity).clm. and band adj gap and energy adj level.clm. and ("200 meV" near10 (conduction adj band) near10 (valence adj band)).clm. and (profile gradient slope).clm. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/18 16:14 |
| S465 | 0 | ((bauer near1 josef-georg).in. (brunner near1 heinrich).in. (schulze near1 hans-joachim).in. infineon.as. siemens.as.) and (sulfur selenium se s) near10 (doping dopant impurity).clm. and band adj gap and energy adj level.clm. and ("200 meV" near10 (conduction adj band) near10 (valence adj band)).clm. and (profile gradient slope).clm. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/18 16:14 |
| S466 | 5 | "392509".ap. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/18 16:18 |
| S467 | 738 | (257/107,148,156).CCLS. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2009/06/19 18:40 |
| S468 | 397 | S467 | USPAT | OR | ON | 2009/06/19 18:40 |
| S469 | 106 | S467 | US-PGPUB | OR | ON | 2009/06/19 18:46 |
| S470 | 235 | S467 not (S468 S469) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/06/19 18:48 |

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